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इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग III—खण्ड 2
[PART III—SECTION 2]

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE

PATENTS AND DESIGNS

Calcutta, the 4th April 1992

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Telegraphic address "PATENTOFIC"

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Telegraphic address "PATENTOFIS".

Patent Office, (Head Office), "NIZAM PALACE", 2nd M. S. O. Building, 5th, 6th and 7th Floor, 234/4, Acharya Jagadish Bose Road, Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees :—The fees may either be paid in cash or may be sent by Money Order or Postal order, payable to the Controller at the appropriate Offices or by bank draft or cheque payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

पेटेंट कार्यालय

एकस्व तथा अभिकल्प

कलकत्ता, दिनांक 4 अप्रैल 1992

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ते में अवस्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेट,
तीसरा तल, लोअर परेल (पश्चिम),
बम्बई-400013 ।

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य
क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा
दिव एवं दादरा और नगर हवेली ।

तार पता—"पेटोफिस"

पेटेंट कार्यालय शाखा,
एकक सं. 401 से 405, तीसरा तल,
नगरपालिका बाजार भवन,
सरस्वती मार्ग, करोल बाग,
नई दिल्ली-110005 ।

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर,
पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों
एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली ।

तार पता—"पेटेंटोफिक"

पेटेंट कार्यालय शाखा,
61, वालाजाह रोड,
मद्रास-600002 ।

आन्ध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य
क्षेत्र एवं संघ शासित क्षेत्र पांडिचेरी, लक्कादिव
मिनिकाय तथा अमिनिदिवि द्वीप

तार पता—"पेटेंटोफिस—

पेटेंट कार्यालय (प्रधान कार्यालय)
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय,
भवन, 5, 6 तथा 7वां तल,
234/4, आचार्य जगदीश बोस रोड,
कलकत्ता-700020 ।

भारत का शेष क्षेत्र

तार पता—"पेटेंट्स"

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क :—शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा डाक आदेश या जहां उपयुक्त कार्यालय अवस्थित है; उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चैक द्वारा की जा सकती है ।

CORRIGENDUM

In the Gazette of India Part III Section 2 :

(a) dated 09-03-91, page 304, Column 2, for accepted Complete specification No. 168313 (895/Cal/85) read the Convention date December 10, 1984, No. 9465 Sri Lanka).

(b) dated 07-12-91, page 1343, Column 2, for accepted Complete specification No. 169691 (685/Cal/88) read the Convention date August 3, 1987, No. PI 3703 (Australia).

REGISTRATION OF PATENT AGENT

The following person has been registered as Patent Agent under Section 126(1) (c) (i) of the Patents Act, 1970.

K. HARISH
64, Armenian Street,
Madras-600 001.

THE PATENT OFFICE

Calcutta, the 4th April 1992

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE, 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed Under Section 135, of the Patents Act, 1970.

The 24th February 1992

124/Cal/92. Hitachi Construction Machinery Co. Ltd., Control system for Hydraulic Pump.

125/Cal/92. Hitachi Construction Machinery Co. Ltd., Hydraulic control system for construction machine.

126/Cal/92. J. M. Voith GMBH; Sieve and Process of the Manufacture thereof.

The 26th February 1992

127/Cal/92. ECP Enichem Polimeri S.R.L., Process for the preparation of a solid component of catalyst for the (CO) polymerization of ethylene.

128/Cal/92. Loesche GHBH, Air-Swept roller mill.

129/Cal/92. Rohrkalibrier-UND Bogenautomaten Rokabo AG. Method and device for manufacturing pipe bends.

130/Cal/92. Chitta Ranjan Mukherjee, Electric generator utilising magnetic energy alone without consuming any fuel.

The 27th February 1992

131/Cal/92. Sunkyong Industries Ltd., Novel plantinum (II) complex and processes for preparing the same.

132/Cal/92. Catalysts and Chemicals EUA rope S.A. (BE/BE), A process for producing synthesis gas for the production of ammonia.

133/Cal/92. Catalysts and Chemicals Europe S.A. (BE/BE), Granular catalysts having an improved mechnical behaviour and methods for preparing these catalysts.

APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH AT TODI ESTATES, 3RD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

The 23rd December 1991

375/Bom/1991. Solanki Joyesh Manubhai. Domestic water saving device.

376/Bom/1991. Narayanan Shankaran Pillai. A liquified petroleum gas stove.

377/Bom/1991. Hoechst India Ltd. Bioactive 7-aminolabdanes and their derivatives.

378/Bom/1991. Kotcherlakota Lakshmi Narayana. A process for the preparation of polyolefinic composite polymers by compound and mixed catalytic agents.

The 26th December 1991

379/Bom/1991. Shri Ravindrakumar Ramji bhai Yadav. Concave bottom pressure cookers cooking utensils heating vessels and vessels type boilers.

380/Bom/1991. K. Chandrasekaran. An apparatus for preventing the accidents caused by the leaking gas from the gas cylinders containing LPG (or) other hazardous gases.

The 27th December 1991

381/Bom/1991. Devendra Somabhai Naik. Improved jet Dying machine.

382/Bom/1991. Ganesh Hari Palnitkar. An electronic ballast for tube lights.

383/Bom/1991. Real Value Appliances Pvt. Ltd. A device for preservation of perishable goods.

The 30th December 1991

384/Bom/1991. KSB Pumps Ltd. Gas filled dry submersible motor.

385/Bom/1991. Indian Oil Corporation Ltd. An improved process for the preparation of a catalyst composite material.

386/Bom/1991. Indian Oil Corporation Ltd. An improved process for hydrocarbon transformations.

The 31st December 1991.

387/Bom/1991. Ravi Tripathi. Electronic earth leakage circuit breaker.

388/Bom/1991. Hemant Madhukar Ranadiv. Vehicle stopper.

389/Bom/1991. Ahmedabad Textile Industry's Research Association. Fabric cell for enhanced surface evaporative saturators.

The 2nd January 1992

1/Bom/1992. Siddarth Mehta. Computer virus protection system achieving an absolute control of the environment and restoration, in Tandem, of the key files and areas of the computer (ACERT VPS).

2/Bom/1992. Tukaram Kundlik Dhonde. Sector wheel (combination of wheels).

3/Bom/1992. Joaquim Antonio Valadares. A thermo hydraulic turbine.

4/Bom/1992. Indian Oil Corporation Limited. An improved process for the production of ashless alkyl xanthates.

5/Bom/1992. Indian Oil Corporation Limited. An improved hydrocarbon lubricant composition having improved load carrying capacity.

The 6th January 1992

6/Bom/1992. Surendra Jeet Singh Sandhu. Electromechanical sound amplifier.

7/Bom/1992. Nirmala Hada. Self soaping shaving brush.

8/Bom/1992. Elder Pharmaceuticals Limited. An improved bottle.

The 7th January 1992

9/Bom/1992.Bhabha Automic Research Centre. A collapsible solar dryer.

10/Bom/1992. Crompton Greaves Limited. A remote control system for a speakerphone.

The 9th January 1992

11/Bom/1992. Chandrakant Shankarlal Shah. An apparatus for injection moulding.

12/Bom/1992. Chandrakant Shankarlal Shah. Aeration of waste water through shock waves.

The 10th January 1992

13/Bom/1992. Kirloskar Pneumatic Co. Limited. An improved air filter for an expressor of diesel eletric locomotive.

14/Bom/1992. Kirloskar Pneumatic Co. Limited. A differential valves to offer an indication of loss of lubricating oil pressure in an expressor.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, IIIRD FLOOR, KAROL BAGH, NEW DELHI-110005.

The 16th December 1991

1230/Del/91. Journeys End International, Inc., "Horse driven hitch cart".

1231/Del/91. Council of Scientific & Industrial Research, "A process for the extraction of nickel from lateritic nickel ore through microbial leaching".

1232/Del/91. Council of Scientific & Industrial Research, "A composition useful for the preparation of stainless steel powders from stainless steel sheets scraps rods through chemical route".

1233/Del/91. Council of Scientific & Industrial Research, "A process for the preparation of stainless steel powders from stainless steel sheets, scraps, rods through chemical route".

1234/Del/91. Council of Scientific & Industrial Research, "An improved process for the preparation of hydrogenated jojoba oil".

1235/Del/91. Council of Scientific & Industrial Research, "An improved method for welding the electrolytic toughpitch (ETC) copper using gas metal arc welding (GMAW) process".

1236/Del/91. Council of Scientific & Industrial Research, "An improved process for the preparation of high molecular weight poly (aryl carbonates)".

1237/Del/91. Chemical Research & Licensing Co., "Paraffin alkylation process".

1238/Del/91. Motorola Inc., "Multi-modulation scheme compatible radio".

1239/Del/91. Paul Pleiger Maschinenfabrik GmbH & Co. KG., "Radial piston engine".

The 17th December 1991

1240/Del/91. Ericsson-GE Mobile Communications Holding Inc., "CDMA substractive demodulation".

1241/Del/91. Edwin Lowe Ltd., "Labyrinth seals and bearing housing assemblies incorporating them". (Convention date 12th January, 91 ((U.K.).)

1242/Del/91. Coflexip, "Flexible tubular conduit comprising a jacket made of crosslinked polyethylene, device and process for manufacturing such a conduit".

The 18th December 1991

1243/Del/91. Chief Controller, Research & Development, "A novel electroless process of deposition of multilaye rcoating".

1244/Del/91. The Director, Forest Research Institute, 'A process for producing synthetic lignosulphonates from soda and/or kraft pulping spent liquors lignin".

1245/Del/91. Ambrish Agarwal, "An apparatus and process for the recovery of sulphur".

1246/Del/91. Whirlpool Corporation, "Automatic washer suspension system".

1247/Del/91. The procter & Gamble Co., "Sanitary napkin having transversely segmented core".

The 19th December 1991

1248/Del/91. Council of Scientific & Industrial Research, "A process for the preparation of test paper for on the spot detection of iodine in a sample".

1249/Del/91. Council of Scientific & Industrial Research, "A process for the treatment of effluents containing toxic materials".

1250/Del/91. Council of Scientific & Industrial Research, 'A novel potentiometric sensor electrode for the estimation of ions in solution".

1251/Del/91. Council of Scientific & Industrial Research "An improved process for the preparation of N-alkyl phthalimides".

1252/Del/91. Council of Scientific & Industrial Research, "A ceramic composition useful in the fabrication of zirconia cells".

1253/Del/91. GPT Ltd., "Orthogonal interconnection". (Convention date 9th January, 91) (U.K.).

1254/Del/91. Motorola Inc., "Feed forward distortion minimization circuit".

The 20th December 1991

1255/Del/91. Glaverbel, "Surface treatment of refractories". (Convention date 17th December, 87) (U. K.) & [Divisional date 15th November, 1988].

1256/Del/91. Sydney E. Tilby, "Structural panel and method and apparatus for its manufacture".

1257/Del/91. Sydney E. Tilby, "Improved method and apparatus for separation of sugarcane pitch from rind".

1258/Del/91. Sydney E. Tilby, "Moving screen apparatus and method for separation of sugarcane pitch from rind".

1259/Del/91. Sydney E. Tilby, "Improved cutting roll with removable blade".

1260/Del/91. Sydney E.Tilby, "Improved slitting apparatus for sugarcane rind".

1261/Del/91. Sydney E. Tilby, "Improved apparatus for control of sugarcane half-billets".

1262/Del/91. Sydney E. Tilby, "Apparatus and method for piling strands in random orientation".

The 23rd December 1991

1263/Del/91. Whirlpool Corporation, "Reciprocating laundry basket for an automatic washer".

1264/Del/91. Whirlpool Corporation, "Concentrated wash automatic washer with reciprocating basket".

1265/Del/91. Whirlpool Corporation, "An automatic washer".
[Divisional date 18th July, 1988].

1266/Del/91. The Procter & Gamble Co., "Selectively weakened cores for core wound paper products".

1267/Del/91. The Procter & Gamble Co., "Refastenable mechanical fastening system and process of manufacture thereof".

1268/Del/91. Richardson-Vicks, Inc., "Polyamine drug-resin complexes".

1269/Del/91. Motorola Inc., "Apparatus and method for equalizing a corrupted signal in a receiver".

1270/Del/91. Motorola Inc., "Increased frequency resolution in a synthesizer".

1271/Del/91. Shell Internationale Research Maatschappij B.V., "Ethylene oxide catalyst and process".

1272/Del/91. Myriam Djelouath & Other, "Solar water heater and a cooling, air conditioning or sea water desalinating apparatus".

The 24th December 1991

1273/Del/91. Sorelec, "Solar lamp stand".

1274/Del/91. Jean-Pierre Denis, "Projectile for rifled weapon". [Divisional date 6th October, 1988].

The 26th December 1991

1275/Del/91. The Procter & Gamble Co., "Absorbent article having rapid acquiring, multiple layer absorbent core".

1276/Del/91. The Procter & Gamble Co., "Absorbent article having rapid acquiring, wrapped multiple layer absorbent body".

The 27th December 1991

1277/Del/91. Visaram Bhoormalji Mistry, "An improved folding baby cradle".

1278/Del/91. Council of Scientific & Industrial Research, "A process for the recovery of copper and ferronickel from the copper converter slag of copper plant".

1279/Del/91. Council of Scientific & Industrial Research, "An imporved process for the synthesis of high silica zeolite zsm-5".

1280/Del/91. Council of Scientific & Industrial Research, "A device useful for sampling of process liquor in a leather tanning drum".

1281/Del/91. Council of Scientific & Industrial Research, "A process for the preparation of a new catalyst useful for the preparation of 2-cyanopyrazine".

1282/Del/91. Council of Scientific & Industrial Research, "An improved process for the production of 2-cyanopyrazine from 2-Methpyrazine via ammoxidation".

1283/Del/91. Council of Scientific & Industrial Research, "A process for the preparation of novel borozilicate analog of Zsm-12".

1284/Del/91. Council of Scientific & Industrial Research, "An improved process for the preparation of saturated fatty alcohols from jojoba oil catalytic hydrogenolysis".

1285/Del/91. Council of Scientific & Industrial Research, "An improved process for the preparation of mefloquin".

1286/Del/91. Imperial Chemical Industries PLC., "Polycyclic dyes". (Convention date 8th January, 91 & 23rd May, 1991) (U.K.).

1287/Del/91. The Lubrizol Corporation, "Diesel fuels containing organometallic couplexes".

The 30th December 1991

1288/Del/91. Tonen Corporation, "A process for the catalytic polymerization or co-polymerization of olefins". [Divisional date 27th September, 1988].

1289/Del/91. Amoco Corporation, "Water addition to crystallization train to purify terephthalic acid product".

1290/Del/91. Colgate-Palmolive Co., "Antiplaque oral compositions".

1291/Del/91. The Lubrizol Corporation, "Trithianes and phosphorus acid and/or thiophosphorus acid derivatives".

The 31st December 1991

1292/Del/91. Esco Corporation, "Excavator wear edge".

The 1st January 1992

1/Del/92. Kashmira Singh Sekhon, "Savita Sharma & Harpritpal Singh Negi, "Dough Moulder for flat bread".

2/Del/92. Imperial Chemical Industries PLC., "Preparation of sulphonyl halides". (Convention date 11th January, 91) (U.K.).

3/Del/92. Imperial Chemical Industries PLC., "Process for preparing halogenated compounds".

4/Del/92. Motorola Inc., "A method and apparatus for optimizing performance of A power amplifier circuit".

The 2nd January 1992

5/Del/92. Dr. N. D. Kaushika, "Solar honeycomb insulated water heater".

The 3rd January 1992

6/Del/92. Sultan Singh Jain, "A plate puller".

7 Del, 92. Sultan Singh Jain., "A signal sensor".

8/Del/92. Aktiebolaget Astra, "Novel steroids".

9/Del/92. Aktiebolaget Astra, "Noval steroid esters".

The 6th January 1992

10/Del/92. UOP, "Activated zeolite beta catalyst and isomerization process therefor".

11/Del/92. Jagdish C. Mangla, "A capsule".

12/Del/92. Krishna Bhatt, "A solar heat tapping window collector".

13/Del/92. Motorola Inc., "Intermodulation compensation in a receiver".

14/Del/92. Randolph-Rand Corporation, "Magnetic latch".

15/Del/92. Scientific Generics Ltd., "Remotely readable data storage devices and apparatus". (Convention date 4th January, 5th February, 8th May, 9th August, 2nd September, 14th October, 91) (U.K.).

The 8th January 1992

16/Del/92. Dipti Datta., "Air damper apparatus". (Convention date 28th February, 91) (Canada).

17/Del/92. Meconway & Torley Corporation, "A cast blockout apparatus for a draft gear pocket".

The 9th January 1992

18/Del/92. Walter Holzer, "Method and device for controlling electric discharge lamps with electronic fluorescent lamp ballasts".

19/Del/92. Pfizer Inc., "A process for the preparation of triazole antifungal agents and a pharmaceutically acceptable salt thereof". (Convention date 13th August, 88) (U.K.) & [Divisional date 18th July, 89].

The 10th January 1992

20/Del/92. Council of Scientific & Industrial Research, "A process for the preparation of iron manganese catalysts for the production of lower olefins from synthesis gas".

21 Del/92. Council of Scientific & Industrial Research, "A process for the preparation of safety paper useful for making bank cheques, drafts and other negotiable documents".

22/Del/92. Council of Scientific & Industrial Research, "An improved process for the extraction of nickel and cobalt from chromite overburden beneficiated chromite overburden at elevated temperature and pressure in the presence of additives".

24/Del/92. Council of Scientific & Industrial Research, "A process for the production of linear alkyl benzenes".

24. Del/92. Council of Scientific & Industrial Research, "A process for the preparation of novel omega type gallosilicate composite material".

25/Del/92. Council of Scientific & Industrial Research "An improved process for the preparation of aromatic polyester(s)".

26/Del/92. Council of Scientific & Industrial Research, "An improved process for the unhairing of hides and skins".

The 13th January 1992

27/Del/92. Suraj Mal., "Improved machinery for manufacturing of clay bricks".

28/Del/92. Shell Internationale Research Maatschappij B.V., "Carbonylation of olefins". (Convention date 15th January, 91, 30th August, 91 & 12th March, 92) (U.K.).

29/Del/92. Motorola Inc., "Amplitude control of a burst in a receiver".

30/Del/92. Virendra Singh, "Naso oral filter & a method of treating asthmatic patients".

The 14th January 1992

31/Del/92. Council of Scientific & Industrial Research, "An improved process for improving the colour and appearance of solvent extracted coconut cake oil and to avoid sediment formation".

32/Del/92. Hughes Aircraft Co., "System for fabricating micro optical elements".

The 16th January 1992

33/Del/92. The Procter & Gamble Co., "Compact detergent compositions with high activity cellulase". Convention date 16th January, 91 & 6th November, 91) (U.K.).

34/Del/92. The Procter & Gamble Co., "Detergent compositions with high activitycellulase and softening clays". (Convention date 16th January, 91 & 6th November, 91) (U.K.).

35/Del/92. Frank M. Hall., "Fortified torch gas and process for making and using the same".

36/Del/92. The Gillets Co., "Shaving compositions".

The 17th January 1992

37/Del/92. Megapulse Incorporated, "Apparatus for message communication of loran-C navigational signal broadcasts". [Divisional date 3rd November, 1988].

38/Del/92. Hindalco Industries Ltd., "Process of recovery of cryolite from pot digging waste material".

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The Written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

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स्वीकृत सम्पूर्ण विनिर्देश

एतद्द्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके नियम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत् विहित प्रपत्र 14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्व को ऐसे विरोध की सूचना विहित प्रपत्र 15 पर दे सकते हैं। विरोध संबंधी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथा विहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिएं।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अंतर-राष्ट्रीय वर्गीकरण के अनुरूप हैं।"

नीचे सूचीगत विनिर्देशों की सीमित संख्यक मुद्रित प्रतियां, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथा समय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु. है।

(अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथा प्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियां यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र व्यवहार द्वारा सुनिश्चित करने के उपरांत उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु. है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Ind. Cl. : 107 I [XLVI (2)] 170491

Int. Cl. : F 02 M 7/00

AN IMPROVED SINGLE HORIZONTAL DRAUGHT CARBURETTOR.

Applicants : BAJAJ AUTO LTD. AKURDI, PUNE-411 035, MAHARASHTRA, INDIA.

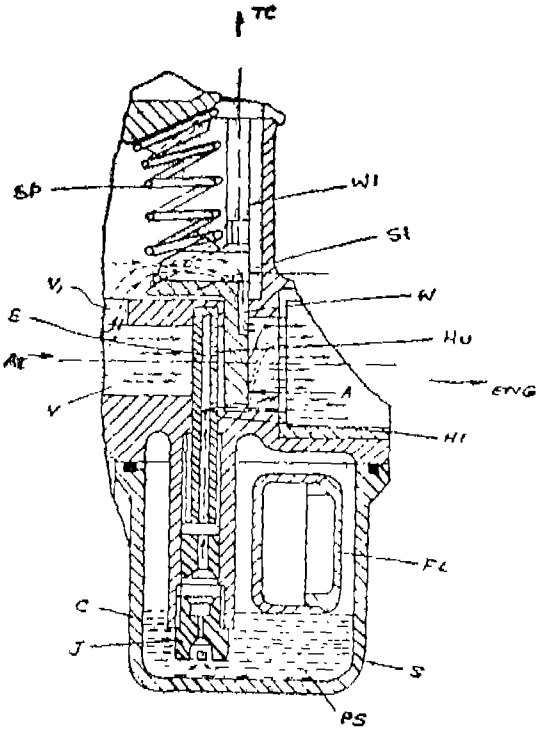
Inventor : AVINASH RAMVILAS GUPTA.

Application No. 251/Bom/1988 filed on 5th September 1988. Complete after prov. left—Nov. 2, 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

2 Claims

An impoved single circuit horizontal draught carburettor for an internal combustion engine, in particular a petrol engine, having an upper hole and a lower hole in the fuel vaporisation tube connected to fuel sump through main jet and a separate air passage, the said lower hole on said tube being effective at the smaller throttle openings and the upper hole in combination with lower hole supplying fuel at wider throttle openings, characterised in that a spring tensioned slide connected to manual throttle control is provided across the carburettor ventury, said slide having a channel extending downwards towards the fuel sump from top to form a passage for supply of additional air from the ventury to the engine at lower throttle openings, said passage for additional air being blocked by the carburettor wall at wider throttle openings



Comp. Spcn. 8 pages. Drg. Nil.

Provisional Specification 7 pages. Drawings 3 sheets.

Ind. Cl. : 55 E 4, XIX (1) 170492

Int. Cl. : A 61 K, 35/78

A PROCESS FOR THE PREPARATION OF PHARMACOLOGICALLY ACTIVE 2, 3, 23-TRIHYDROXY-URS-12-ene DERIVATIVES.

Applicant : HOECHST INDIA LIMITED, AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT HOECHST HOUSE, NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY-400 021 MAHARASHTRA, INDIA.

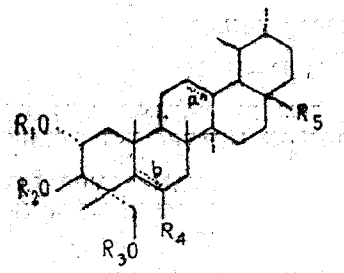
Inventors : (1) DR. NOEL JOHN DE SOUZA (2) MS. VIRBALA SHAH (3) PREMANAND DURGARAO DESAI (4) PRABHAKAR KRISHNA JI INAMDAR (5) ADOLF D'SA. (6) RADHAKRISHNA AMMANAMANCHI (7) ALIHUSSEIN NOMANBHAI DOHADWALIA (8) AFTAB DOWOODBHAI LAKDAWALA (9) SADASHV SHANTARAM MANDREKAR (10) DR. JURGEN BLUMBACH.

Application No. 342/BOM/1988 filed on 19th December, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

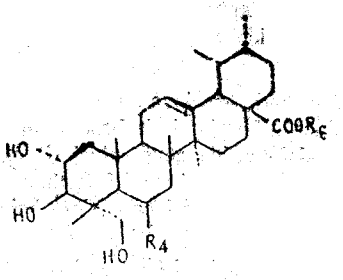
2 Claims

A process for the preparation of pharmacologically active 2, 3, 23-trihydroxy-urs-12-ene derivatives of the formula I



Formula I

shown in the drawings accompanying the provisional specification, wherein R_1, R_2 and R_3 which may be the same or different stand for hydrogen or acyl with the proviso that R_1, R_2 and R_3 are not hydrogen simultaneously, R_4 stands for hydrogen, hydroxy or acyloxy, 'b' is a single bond or double bond, R_5 stands for the group $COOR_6$, wherein R_6 stands for hydrogen, alkyl or poly-glycosyl and 'a' stands for an optional double bond between carbon atoms 12 and 13, said process consisting of acylating a compound of the formula III



Formula III

shown in the drawings accompanying the provisional specification, wherein R_4 and R_6 are H and glu-glu-rham, respectively (asiaticoside) or OH and glu-glu-rham, respectively (madecassoside) or both H (asiatic acid) or OH and H respectively (madecassic acid), with an acid derivative in the presence of a base and a solvent at O°C to the boiling point of the solvent.

Provisional Specification 17 pages. Drawings 1 sheet.

Complete Specification 13 pages Drawings Nil.

Ind. Cl. : 37 A [XXXIV (1)] 170493
80 K, (VI)

Int. Cl. : B 01 D, 57/00

A SKIMMING APPARATUS.

Applicant & Inventor : SALEAM ESSOP, SOUTH AFRICAN NATIONAL OF INDIAN ORIGIN OF 97, SIR KURMA REDDI ROAD, CLAIRWOOD, DURBAN, NATAL PROVINCE, REPUBLIC OF SOUTH AFRICA.

Application No. 110/BOM/1989 filed on 24th April 1989. Complete after Prov 31-1-1990.

Application No. 110/BOM/1989 filed on 24th April 1989. Complete after Prov 31-1-1990.

6 Claims

1. A liquid skimming apparatus for skimming a surface layer of liquid from a liquid body, which includes :

a hollow body defining at one end an inlet and at the other end two outlets spaced apart from each other connectable to fluid displacement means for displacing a liquid through the body and via the inlets and the outlets; and

a separating formation for separation from the liquid passing through the body, the surface layer of the liquid, such as, baffle plate dividing the hollow body into a first passage leading into one of the outlets through which a separated surface layer of liquid may be displaced and a second passage leading into the other outlet through which the rest of the liquid may be displaced.

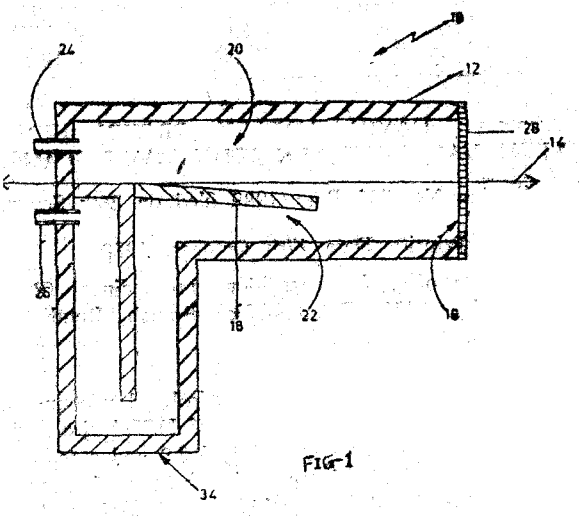


FIG-1

Prov. Specn. 9 pages. Drg. 1 sheet.

Comp. Specn. 12 pages. Drgs. 1 sheet.

Ind. Cl. : 189 [LXVI (9)] 170494

Int Cl. : A 61 K—7/075, D 11 D—1/655

METHOD FOR PREPARING AN AQUEOUS SHAMPOO COMPOSITION.

Applicants : HINDUSTAN LEVER LIMITED, OF HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY 20, MAHARASHTRA, INDIA, A COMPANY INCORPORATED UNDER THE INDIAN COMPANIES ACT, 1913.

Inventor : ANDREW MALCOLM MURRAY.

Application No. 164/BOM/1989 filed on 15th June 1989. U. K. Priority date 16-6-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Bombay Branch.

14 Claims

Claim—1

A method for preparing an aqueous shampoo composition comprising mixing :

(a) from 1 to 40% by wt. dialkylsulphosuccinate, and

(b) from 0.01 to 10% by wt. soluble anti-microbial agent from 1-hydroxy-2-pyridone, 1-chlorophenoxy, 1-imidazolyl-butanoune or derivatives thereof.

(c) balance water.

wherein the dialkylsulphosuccinate is a sodium or ammonium dialkysulphosuccinate with alkyl chain lengths of from C6 to C9 or combinations thereof.

Complete Specification 16 pages. Drawing 1 sheet.

Ind. Cl. : 40 F [IV (1)] 170495

Int. Cl. : A 23 j—1/00

PROCESS FOR PREPARING IMPROVED HYDROLYSED PROTEIN.

Applicant : HINDUSTAN LEVER LIMITED OF HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY-400 020 MAHARASHTRA, INDIA. A COMPANY INCORPORATED UNDER THE INDIAN COMPANIES ACT, 1913.

Inventors : DAVID AINSLEY BROWN HENDRIK WILLEM VAN MEETEREN JOHN DAVIS SIMMONS.

Application No. 262/Bom/1989 filed on 26th September, 1989.

Convention Priority Date 17th October, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay.

10 Claims

A process for improving HCL-hydrolysed protein characterised in that an aqueous solution of HCL-hydrolysed protein is kept at a pH between 5.5 and 8.0 and a temperature between 70 and 180°C for a period between 10 days and 5 minutes whereby the monochloropropanediols and dichloropropanols are hydrolysed to glycerol.

Comp. Specn. 11 pages. Drg. Nil.

Ind. Cl. : 40 F[IV (1)] 170496

Int Cl. : A 23 J—1/00

PROCESS FOR PREPARING IMPROVED HYDROLYSED PROTEIN.

Applicants : HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventor : LAURENCE SIDNEY PAYNE.

Application No. 264/BOM/1989 filed on 26th September, 1989. U.K. Priority Date 17-10-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

9 Claims

A process for preparing an improved HCl-hydrolysed protein by a hydrolysis reaction characterized in that the hydrolysis reaction of protein with hydrochloric acid is initially carried out at a temperature between 60 and 97°C and that the reaction temperature is increased to a temperature between 100-110°C over a reaction period of between 2—24 hours and that the reaction mixture is kept at the higher temperature for a period of 15 minutes to 2 hours followed by cooling, neutralizing and filtering by conventional methods.

Comp. Specn. 9 pages. Drgs. Nil.

Ind. Cl. : 170A XLIII (9) 170497

Int. Cl. : C 11 D—11/00

PROCESS FOR PREPARING A HIGH BULK DENSITY GRANULAR DETERGENT COMPOSITION.

Applicants : HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY-400 020.

Inventors : (1) PETER WILLEM APPEL (2) PETRUS LEONARDUS JOHANNES SWINKELS (3) MARCO WAAS.

Application No. 296/BOM/1989 filed on 2nd November, 1989. U.K. Priority 2-11-1988 & 16-12-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

9 Claims

Process for the continuous preparation of a granular detergent composition or component having a bulk density of at least 650 g/l, which comprises treating a particulate starting material such as herein described

(i) in a first step in a high-speed mixer/densifier, the mean residence time being from about 5-30 seconds;

(ii) in a second step in a moderate-speed granulator/densifier, whereby it is brought into, or maintained in, a deformable state which is characterised by a compression modulus of less than approximately 25 MPa, the mean residence time being from about 1-10 minutes; and

(iii) in a final step in drying and/or cooling apparatus.

Comp Specn. 23 pages. Drg. Nil.

Ind. Cl. : 189 LXVI. 170498

Int. Cl. : A 61 K—7/16.

METHOD OF MAKING ORAL COMPOSITIONS.

Applicants : HINDUSTAN LEVER LTD., HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA, A COMPANY INCORPORATED UNDER THE INDIAN COMPANIES ACT, 1913.

Inventors : (1) UNUS SULAIMAN ADAM, (2) GRAHAM THOMAS BROWN, (3) IAN GARDNER LYLE and (4) MICHAEL JOHN PARKINGTON.

Application No. 303/Bom/1989 filed on 9-11-1989, U.K. priority date 10-11-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

6 Claims

A method of making an oral composition for removing oral bacteria and neutralizing acids produced by oral bacteria, comprising mixing a hydrotalcite-like material and other suitable known ingredients characterised by mixing from 0.01% to 30% by weight of a hydrotalcite-like material of the following formula :

$$M_mN_{n+p}(OH)_{2(m+n+p)} \quad A_zY^{-}XH_2O$$

where

M is any 2+ cation or combination of 2+ cations

N is any 3+ or 4+ cation or combination of 3+ and /or 4+ cations

with the proviso that M is not solely Mg when N is solely aluminium, and where

m is sum of the individual mole fractions of the 2+ cations

n is sum of the individual mole fractions of the 3+ cations

P is sum of the individual mole fractions of the 4+ cations

where either but not both of n and p can be zero, $m+n+p=1$ and $O < n+p \leq m$

A^{Y-} is any anion of charge y- and mole fraction z, z or combination of anions of similar or different y- and (the sum of the mole fraction) times (the charge on the anion) is given by the expression

$$\sum_{i=1 \rightarrow t} Y_iZ_i = n+2p$$

where t is the total number of anions and x can range from O to 100.

Compl. Specn. 14 pages. Drg. Nil.

Ind. Cl. : 89 [XL I(6)]. 170499

Int. Cl. : G 01 N—3/42, 3/52.

AN IMPROVED COMPOSITE INDENTATION HARDNESS TESTER WITH BUILT-IN BASE FOR RUBBER, AND THE LIKE SUBSTANCES SUCH AS SOFT OR HARD PLASTICS AND TEXTILE WOUND PACKAGES.

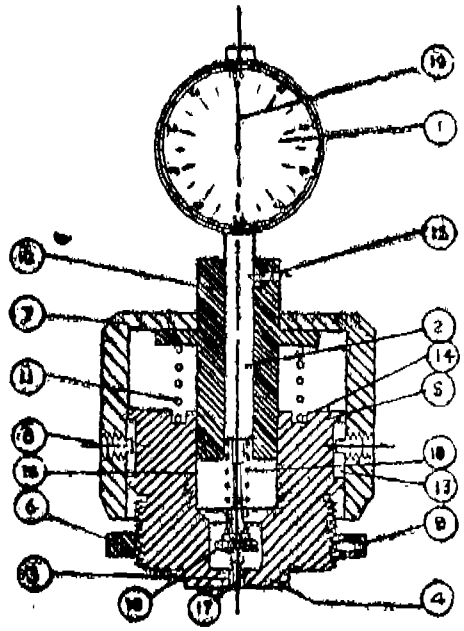
Applicant & Inventor : KUMAR BALRAM BHATIA, 408-A POONAM APARTMENTS, DR. ANNIE BESANT ROAD, WORLI, BOMBAY-400 018, MAHARASHTRA, INDIA.

Application No. 157 Bom/1990 filed on June 18, 1990.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

11 Claims

An improved composite indentation hardness tester with builtin base for rubber and the like substances comprising a base (5) having a stepped presser foot (4) at its bottom, a hole (17) provided in the presser foot, a central cavity (16) provided in the base, a container cover (7) slidably held over the said base, a stopper means (6) provided on the said base for achieving a standard desired movement of the said base and the said container cover, a clamping pressure spring (11) provided inside the said container cover over the said base, a rubber hardness tester of the known type, with its extended spindle (2) passing through the said container cover into the central cavity of the said base, an indentor tip (3) fixed at the bottom end of the said spindle passing through the hole in the said presser foot and being just in level with the outside surface of the presser foot and a calibrating spring (10) provided over the said spindle inside the said central cavity in the base.



Compl. Specn. 8 pages. Drg. 3 sheets.

Ind. Cl. : 170 D [XL III (4)]. 170500

Int. Cl. : C 11 D, 9/00

DETERGENT COMPOSITION.

Applicant : HINDUSTAN LEVER LIMITED, OF HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA, A COMPANY INCORPORATED UNDER THE INDIAN COMPANIES ACT 1913.

Inventors : (1) VINODKUMAR RAMNIRANJAN DHANUKA, (2) GORDON GEORGE MCLEOD, (3) NIRAJ DHANSUKHLAL MISTRY, (4) DAVID CHARLES STEER and (5) GRAHAM WALKER.

Application No. 209/Bom/1990 filed on 14th August 1990.

Convention priority date—16-8-1989 and 28-9-1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

6 Claims

1. A detergent composition comprising

(i) from 3 to 60% by weight of at least one detergent active; and

(ii) from 0.1 to 10% by weight of a polyethylene glycol of molecular weight in the range 400 to 5000.

Compl. Specn. 18 pages. Drg. Nil

Ind. Cl. : 40 H. 170501

Int. Cl.[5] : B01D 53/02.

IMPROVED PRESSURE SWING ADSORPTION PROCESS FOR THE RECOVERY OF A LESS READILY ADSORBABLE COMPONENT FROM A FEED GAS MIXTURE.

Applicant : UNION CARBIDE CORPORATION, Manufacturers, a corporation organised and existing under the laws of the State of New York, U.S.A., with offices at : Old Ridgebury Road, Danbury, State of Connecticut, 06817, United States of America.

Inventors : WILLIS EDWARD HISCOCK, ROBERT THOMAS CASSIDY and ROBERT GARY WERNER.

Application for Patent No. 267/Del/86 filed on 21 Mar 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

8 Claims

A pressure swing adsorption process for the separation and the recovery of a less readily adsorbable component such as herein described of a feed gas mixture such as herein described in an adsorption system capable of selectively adsorbing a more readily absorbable component such as herein described from said gas mixture, the adsorption system having at least four adsorbent beds, each of which undergoes on a cyclic basis, the following processing sequence comprising :

(1) passing said feed gas mixture to the feed end of one of said beds so that said more readily absorbable component is adsorbed at an upper adsorption pressure and said less readily absorbable compronent is discharge as a product effluent from the product end of said bed; (2) subjecting said bed to a co-current depressurization so that void space gas is released from said bed and passed to other beds for purging and pressure equalisation of said other beds; (3) counter currently depressuring said co-currently depressurized bed to a lower adsorption pressure so that said more readily absorbable component is released from the feed end of said bed; (4) purging said counter currently depressurized bed at said lower desorption pressure; (5) partially repressuring said purged bed by pressure equalization with void space gas released from other beds and (6) repressurizing said partially repressurized bed to said uppper adsorption pressure characterised by :

(a) passing said void gas released during said co-current depressurisation from said upper adsorption pressure to an upper intermediate pressure simultaneously to one other bed being partially repressurized to said upper intermediate pressure and to a second other bed as purge gas for said bed at its lower desorption pressure level,

(b) continuing to pass said void gas released from said bed being depressurized to said second other bed as purge gas so that said bed being depressurized is further depressurized from said upper intermediate pressure to an intermediate pressure,

(c) passing additional void space gas released from the product end of said depressurized bed by further cocurrent depressurization of said bed from said intermediate pressure level to a lower intermediate pressure to yet another bed for pressure equalisation there between at said lower intermediate pressure and simultaneously counter currently depressurizing said cocurrently depressurized bed by the discharge of gas from the feed end of the bed, said counter current depressurization being continued after the completion of said pressure equalisation down to the lower desorption pressure of said bed so that said less readily absorbable component is separated and

(d) recovering in any known manner said less readily absorbable component.

Compl. Specn. 22 pages.

Ind. Cl. : 152 E. 170502

Int. Cl.[4] : C08F 114/06.

"A POLYVINYL CHLORIDE COMPOSITION AND METHOD FOR MANUFACTURING THE SAME".

Applicant : THE B. F. GOODRICH COMPANY, a New York Corporation, of 500 South Main Street, Akron, Ohio-44318, U.S.A.

Inventors : ROMAN WACLAW WYPART & JAMES WILLIAM SUMMERS.

Application for Patent No. 742/Del/86 filed on 18th August, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

11 Claims

A polyvinyl chloride composition comprising :

(i) 100 parts by weight of PVC.

(ii) Stabilizer system comprising one or more soap selected from 0.005 part by weight to 1.0 part by weight of at least one zinc soap, and from 0. to 1.0 part by weight of at least one calcium soap.

(iii) Co-stabilizer system comprising from 0.2 part by weight to 1.5 parts by weight of at least one co-stabilizer compound selected from the group consisting of compounds having the formulae OH-X-O.-R and R-O-X-O-R.,

(a) from 2 to 20 oxygen atoms, wherein at least one of said oxygen atoms forms an either linkage and the remainder from bonds selected from the group consisting of ether, epoxy and hydroxy and from 4 to 60 carbon atoms; and

(b) wherein R is a straight chain radical having from about 5 to about 40 carbon atoms of the kind such as herein described.

A method for the manufacture of a polyvinyl chloride composition comprises mixing :

(i) 100 parts by weight of PVC :

(ii) Stabilizer system comprising one or more soap selected from 0.005 part by weight to 1.0 part by weight of at least one zinc soap, and from 0 to 1.0 part by weight of at least one calcium soap;

(iii) co-stabilizer system comprising from 0.2 part by weight to 1.5 parts by weight of at least one co-stabilizer compound selected from the group consisting of compounds having the formulae OH-X-O-R and R-O-X-O-R, wherein X is a straight chain, branched or cyclic radical having

(a) from 2 to 20 oxygen atoms, wherein at least one of said oxygen atoms forms an either linkage and the remainder forms bonds selected from the group consisting of ether, epoxy and hydroxy; and from 4 to 60 carbon atoms; and

(b) wherein R is a straight chain radical having from about 5 to about 40 carbon atoms.

Compl. Specn. 33 pages.

Ind. Cl. : 32 F2(a). 170503

Int. Cl. E[4] : C07C 87/54.

PROCESS FOR THE PREPARATION OF 4-NITRODIPHENYLAMINES.

Applicant : BAYER AKTIENGESELLSCHAFT, a body corporate organised under the laws of the Federal Republic of Germany, of Leverkusen, Bayerwerk, Federal Republic of Germany.

Inventor : ERNST WILLI MULLER.

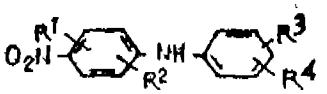
Application for Patent No. 26/Del/87 filed on 15 Jan 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

5 Claims

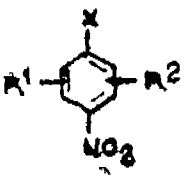
A process for the preparation of 4-nitrodiphenylamines of the formula I of the drawings.

I



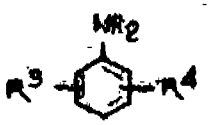
in which R^1, R^2, R^3 and R^4 are identical or different and represent hydrogen or an alkyl radical with 1 to 9 carbon atoms, by reaction of halogenonitrobenzenes of the formula II of the drawings

II



in which X represents chlorine or bromine, and in which R^1 and R^2 have the abovementioned meaning, with primary aromatic amines of the formula III of the drawings

III



in which R^3 and R^4 have the abovementioned meaning, in the presence of potassium carbonate and copper compounds or with the formyl derivatives of the aromatic amines of the formula (III) in the presence of potassium carbonate, characterised in that a metal from the series comprising aluminium, magnesium and zinc or a mixture of two or more of these metals or an alloy of two or more of these metals or an alloy of one or more of these metals with one or more alkali metals and/or with calcium and tin is added.

Compl. Specn. 8 pages. Drg. 1 sheet.

Ind. Cl. : 32 E. 170504

Int. Cl.[1] : C08F 2/00.

IMPROVED PROCESS FOR PRODUCING POLYMERS.

Applicant : THE B. F. GOODRICH COMPANY, a New York Corporation, of 500 South Main Street, Akron, Ohio 44318 U.S.A.

Inventors : CHARLES ANTHONY DANIELS, JOSEPH EDWARD FATTLAR & KEITH LESLIE GARDNER.

Application for Patent No. 248/Del/87 filed on 23 Mar 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

7 Claims

An improved process for producing polymers comprising polymerizing at least one monomer in an aqueous medium in the presence of at least one catalyst of the kind such as herein described and at least one dispersant of the kind such as herein described to obtain an aqueous slurry of polymer particles, wherein at least one wetting agent is employed in the range of from 0.05 part by weight to 0.5 part by weight per 100 parts by weight of polymer particles, said wetting agent is added to said slurry after the polymerization is substantially complete.

Compl. Specn. 18 pages.

Ind. Cl. : 77B1. 170505

Int. Cl.[1] : B 03/B/1/00.

TALLOW EXTRACTION APPARATUS FOR USE WITH A DEHYDRATOR.

Applicant : AKT CONSULTANTS PTY. LIMITED, a company incorporated under the laws of the State of New South Wales, Commonwealth of Australia, and having a place of business at the Maroochy Industrial Estate on the Corner of Maroochydore Road and Enterprise Street, Kunda Park, Buderim, Queensland, 4556 Commonwealth of Australia.

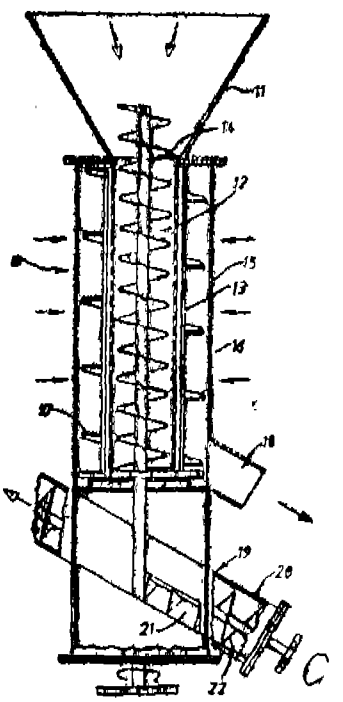
Inventors : JOSE LUIS RUIZ AVILA and DIETER HOPPE.

Application for Patent No. 263/Del/87 filed on 26 Mar 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

6 Claims

A tallow extraction apparatus (10) for removing tallow from organic matter, the apparatus comprising an inlet (11) and an oltuet (18), a screw conveyor being coaxially supported within said apparatus for conveying matter between the inlet and the outlet, a compression device below the inlet being disposed within said apparatus to compress matter flowing along the conveyor in order to press tallow from the matter, a perforated wall at least partially surrounding said conveyor so that tallow can be extracted through the wall.



Compl. Specn. 11 pages. Drg. 9 sheets.

Ind. Cl. : 101 BF, XXVIII (2). 170506

Int. Cl : E04 C 1/06, 1/10.

A CAST CONCRETE FOR USE IN THE MANUFACTURE OF A SHELL FOR PROTECTING A SEA OR RIVER CONSTRUCTION.

Applicant : LABORATOIRE CENTRAL D' HYDRAULIQUE DE FRANCE of 10 rue Eugene Renault 94700 MAISONS ALFORT, FRANCE, A French company.

Inventors : JACQUES CARPENTIER.

Application for Patent No. 264/Del/87 filed on 26 Mar. 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

7 Claims

An artificial cast concrete block for use in the manufacture of a shell for protecting a river or sea construction which is in the form of a pyramid or a prism with a base characterised in that said block comprises two parallely disposed polygonal bases, said bases being geometrically similar and angularly offset with respect to each other at a predetermined distance from each other, the corresponding sides of the said bases being interconnected by means of skew side walls having a predetermined scale factor so that the block is inscribed within a right prism based on the larger of said bases and is in the form of a trucated, twisted pyramid on a polygonal base.

FIG. 1

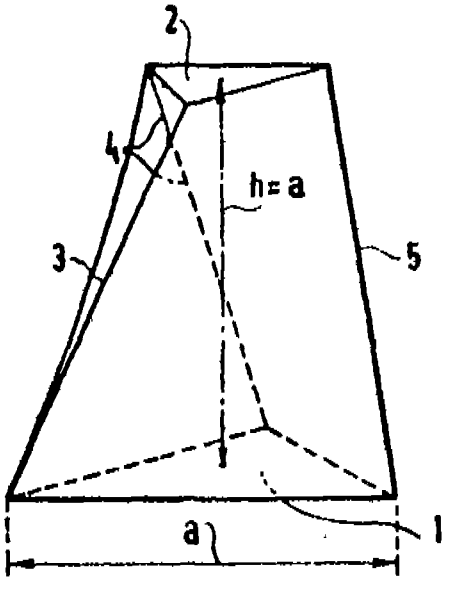
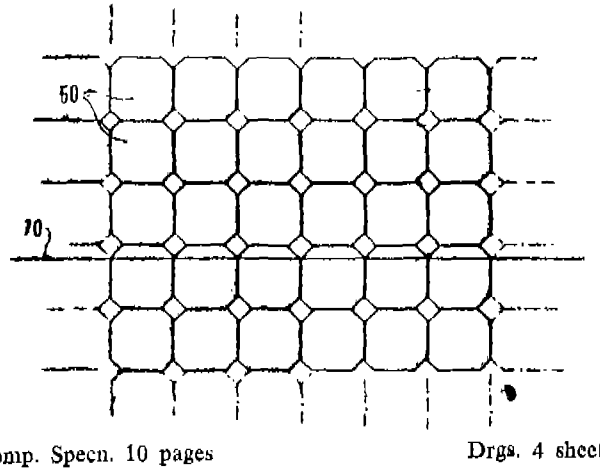


FIG. 11



Comp. Specn. 10 pages Drgs. 4 sheets

Ind. Cl. 98 I. 170507

Int. Cl4 : F24J 2/00.

AN IMPROVED MULTI-SURFACE SOLAR STILL FOR CONVERTING SALINE OR POLLUTED WATER INTO FRESH OR DISTILLED WATER.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

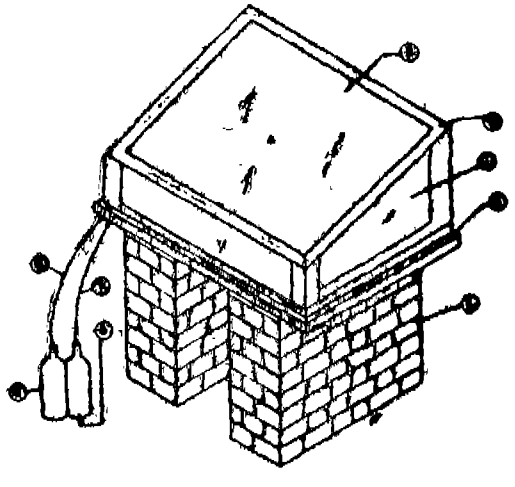
Inventor : SATYA PRAKASH ANAND.

Application for Patent No. 324/Del/87 filed on 15 April 1987. Complete specification left on 04 May 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

3 Claims

An improved multi surface solar still for converting saline or polluted water into fresh or distilled water which comprises a chamber having four removable side walls (1), a transparent top cover (2) fitted in a frame (3) and a bottom slab (4), the bottom slab (4) being provided with four built in slits (21) along its periphery and four built in seats (16) at its corners for holding four pillars (14A and 14B) having threaded bolt like fixtures (17) and vertical grooves (18) on its inner adjacent sides for fixing the top cover (2) and side walls (1), the two front pillars (14A) being equal but shorter in length than the two rear pillars (14B) to provide an inclination to the top cover (2), the top cover (2) having a channel (11) on its under surface along its lower edge with an opening (12) covering a receptacle (25, 6 & 8), the bottom slab (4) also being a built in channel (19) on the inner side of the side walls, the channel (19) being provided with an opening (20) fitted with a water tight plug (22) through which are passed water inlet pipe (23) and outlet pipes (24 & 25) for collecting the condensed distilled water from the side walls (1) and top cover (2).



Provisional Specn 6 pages Drgs. 3 sheets.
Compl. Specn. 1 pages0 pages Drgs. 2 sheets.

Ind. Cl. : 32F 2b 170508

Int. Cl.4 : C07D 307/04 & 307/20.

PROCESS FOR PREPARING FURAN POLYOLS.

Applicant : CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT, A FRENCH COMPANY OF 4, AVENUE DU RECTEUR POINCARE, 75782 PARIS CEDEX 16, FRANCE.

Inventors : GABRIEL ROUX, JANINE RIVERO & ALESSANDRO GANDINI.

Application for Patent No. 1044/Del/87 filed on 07 Dec. 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

10 Claims

Process for preparing furan polyols said process comprises reacting a compound selected from a polyalcohol such as herein described, a monoamine or a polyamine such as herein described and mistures thereof, said polyalcohol or said amine may containing at least one furan cycle with a chain extension agent such as herein described and may containing at least one furan cycle constituted by an organic epoxide of the kind such as herein described with the proviso that this organic epoxide is a furannic oxiran when this polyalcohol does not contain a furan cycle; with the exclusion of 2, 5-bis (hydroxymethyl) furan as sole group when the chain extension agent does not contain a furan cycle.

Comp. Specn. 22 pages Drgs. 2 sheets

Ind. Cl. : 32 $F_2(_b)$ 170509

Int. Cl.[4] : C07D 295/06 & 295/10.

A PROCESS FOR THE PREPARATION OF 1 FORMYL 2, 3, 5, 6 SUBSTITUTED PIPERAZINES USEFUL AS MALE FERTILITY REGULATING AGENTS.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI 1860).

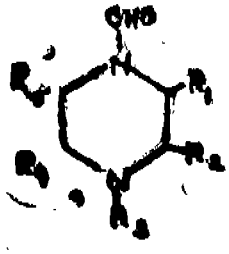
Inventors : ANIL KUMAR DWIVEDI, JAGAT PAL SINGH SARIN, NANDOO MAL KHANNA, ARCHANA SRIVASTAVA & BACHU SRINIVASULU SETTY.

Application for Patent No. 1128/Del/87 filed on 28 Dec. 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

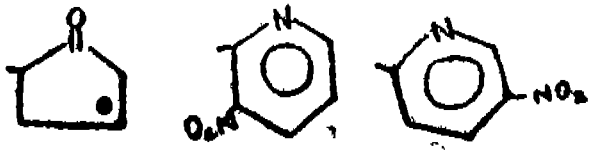
5 Claims

A process for the preparation of a formyl 2, 3, 5, 6 substituted piperazines of the formula II of the drawings accompanying this specification



II

wherein R_1 and R_4 represent hydrogen or alkyl, R_2 and R_5 represent hydrogen, R_3 represents a radical of the formula III, IV or V



III IV V

which comprises reacting corresponding 1-formyl-piperazine of the formula I wherein R_1, R_2 and R_4 have the meanings given above and R_3 represents hydrogen or alkyl with a heterocyclic compound having N, O, or S as hetero items selected from a corresponding lactonyl or an alycyclic or open chain or acryl or arylalkyl halide or a correspondingly substituted 2-halo piperazine in a known organic solvent in the presence of an anhydrous alkali salt, separating the resultant 1-formy 1-2.3.5.6. substituted piperazine and purifying it by conventional methods.

Compl. Specn. 9 pages. Drg. 1 sheet.

Ind. Cl. : 32 F_3C, 55E_1 170510

Int. Cl. : C13K—13/00.

AN IMPROVED PROCESS FOR THE SYNTHESIS OF 3, 6 Di-O-METHYL-D-GLUCOSE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventor(s) : DR. ASISH KUMAR SEN, KALYAN KUMAR SARKAR & DR. NILIMA BANERJI.

Application for the Patent No. 1158/Del/87 filed on 31 December 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

9 Claims

An improved process for the synthesis of 3, 6-di-O-methyl-D-glucose which comprises acetonating D-glucose by known methods to produce 1, 2, 5, 6-diisopropylidene-α-D- glucose methylating 1, 2, 5, 6 diisopropylidene α-D-glucose by known methods to get 1, 2, 5, 6 diisopropylidene-3-O-methyl=α-D-glucose partially hydrolysing the same to obtain 1, 2-isopropylidene-3-O=methyl-α-D-glucose followed by tosylating to produce 1, 2 isopropylidene 6-O-tosyl-3-O-methyl α-D-glucose, SN_2 displacement by known method to obtain 1, 2, isopropylidene-3-6-di=O-methyl-α-D-glucose, hydrolysing 1, 2 isopropylidene 3-6-di-O-methyl α-D-glucose completely by known methods to produce 3, 6-di-O-methyl-D-glucose and finally purifying the same by known methods.

Compl. Specn. 10 pages. Drg. 1 sheet.

Ind. Cl. : 128 A [GROUP XIX (2)] 170511

Int. Cl.[4] : A 61 F 13/00.

MICROFIBER MICROWEBS AND A METHOD FOR PRODUCING THE SAME.

Applicant : MINNESOTA MINING AND MANUFACTURING COMPANY, A CORPORATION OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, DOMICILED AT 3M CENTER, SAINT PAUL, MINNESOTA 55144—1000, U.S.A.

Inventor : THOMAS IRVING INSLEY.

Application No. 841/Mas/87 filed on 23rd November, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, Madras.

8 Claims

Microfiber microwebs comprising relatively dense microfiber nuclei (6) having a diameter of 0.05 to 4 mm with individual microfibers and/or microfiber bundles (7) protruding therefrom to form microfiber microwebs (4) having a diameter of 0.07 to 10 mm, said microfibers having a

diameter of less than about 10 microns and being polymeric meterial selected from polyolefin, polyester, polyamide, polyvinyl chloride, acrylic and acrylic copolymers, polystyrene or polysulfone.

Compl. Specn. 46 pages. Drg. 3 sheets.

Ind. Cl. : 39 K [GROUP III] 170512

Int. Cl.[4] : C 01 B 15/023.

AN IMPROVED PROCESS FOR PRODUCING HYDROGEN PEROXIDE BY ANTHRAQUINONE PROCESS.

Applicant : KEMIRA OY, A FINNISH JOINT STOCK COMPANY, OF PORKKALANKATU 3, SF-00180 HELSINKI, FINLAND.

Inventors : 1. EVA LISA MUSTONEN.
2. ILKKA TURUNEN.

Application No. 847/Mas/87 filed on 24th November, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

3 Claims

In a process for producing hydrogen peroxide by anthraquinone process comprising dissolving an alkylated anthraquinone in an organic solvent to form a working solution and catalytically hydrogenating, oxidising the extracting hydrogen peroxide from the solution in a repeated cycle, the improvement comprises in circulating a reaction mixture containing a hydrogen-containing gas, the said working solution and a solid, finely divided hydrogenation catalyst, in a reactor tube system equipped with static mixers, the pressure in the tube system being 1–15 bar, the temperature in the tube system being 20–100 celsius, the flow rate of the working solution in the reactor tube system being 1–3 m/s, preferably 1-1.5 m/s, the concentration of the finely divided hydrogenation catalyst in the working solution being 0.5-3 g/1, and the length of the reactor tube system being less than 30 m.

Compl. Specn. 12 pages. Drg. 2 sheets.

Ind. Cl. : 32-F—[GROUP-IX(1)] 170513

Int. Cl.[4]—C/08/G 18/00.

A PROCESS FOR PREPARATION ANTISTATIC POLYURETHANE FOR PREPARING SHOE SOLES.

Applicant : THE DOW CHEMICAL COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A. OF 2030 DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventors : (1) J.SE V. SAAVEDRA,
(2) STEVE A SIMS,
(3) DOUGLAS L. HUNTER,
(4) DONALD M. MASCHEMEYER,
(5) THOMAS M. KNOBEL.

Application No. 848/Mas/87 filed November 24, 1987.

Appropriate Office for Opposition Proceedings Rule 4, Patents Rules., 1972) Patent Office Branch, Madras.

3 Claims (No drawing)

A process for preparing an antistatic polyurethane for preparing shoe soles which comprises reacting a reaction mixture comprising :

(a) a relatively high equivalent weight polyester polyol, containing from 5 to ' weight per cent repeating units derived from ethylene oxide and from 75 to 95 weight per cent repeating units derived from a C_3–C_6 cyclic ether,

(b) A known chain extender compound, in an amount of from 5 to 40 parts per 100 parts of component (a),

(c) an amount of a blowing agent to provide a density of from 10 to 65 pounds per cubic foot (16 to 104 kg/m^3),

(d) a polyisocyanate, in an amount to provide from 0.9 to 1.2 isocyanate groups per active hydrogen-containing group present in the reaction mixture, and

(e) a non-volatile ionizable metal salt such as herein described, in an amount from about 0.01 to about 1 part per 100 parts by weight of component (a),

said reaction being conducted in the substantial absence of a carboxylic acid ester of 6-30 carbon atoms,, a fatty acid salt and a phosphate ester compound and recovering antistatic polyurethane by any known manner.

Compl. Specn. 24 pages.

Ind. Class : 40-H—[GROUP-IV(1)]

Int. Cl.[4] : B 01 D 53/34.

AN APPARATUS FOR CONCURRENTLY CONTACTING A SOUR GASEOUS STREAM AQUEOUS REACTANT SOLUTION.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., CAREL VAN BYLANDTAAN 30, 2596 HR, THE HAGUE, THE NETHERLANDS, A NETHERLANDS COMPANY.

Inventors : (1) HOWARD LAM-HO FONG
(2) DAVID ALLAN VAN KLEECK
(3) JOHN MICHAEL HARRYMAN.

Application No. 906/Mas/87 filed on December 17, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules,, 1972) Patent Office Branch, Madras.

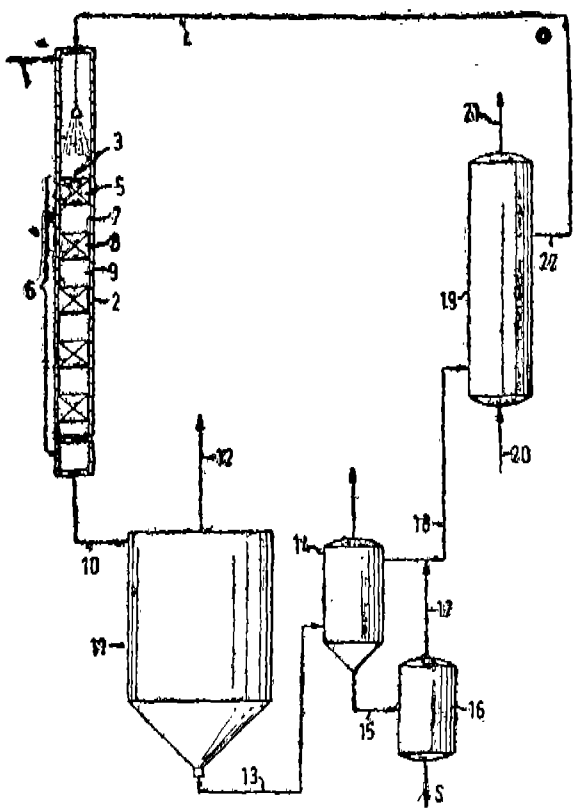
2 Claims

An apparatus for concurrently contacting a sour gaseous stream with an aqueous reactant solution comprising:

(a) a first contacting zone prrovided with an inlet for the sour gaseous stream and for the reactant solution;

(b) a second contacting zone in fluid communication with the first contacting zone having an outlet, consisting of a plurality of enclosed contacting sections in serial flow communication, wherein the first contacting section has a plurality of discrete sulphur deposition resistant channels, each said discrete channel provided with a diverted flow path for gas-solution mixture, through the said section for directing the gas-solution mixture at least initially at an angle acute to that of the direction of flow of the gas-solution mixture entering the said section, the second contacting section consisting an enclosed mixing section for allowing radial mixing of gas-solution mixture, redistributing the solution in gas and inhibiting plugging due to sulphur formation, and the third contacting section consisting a plurality of discrete sulphur deposition resistant channels, each discrete channel provided with a diverted flow path for gas-solution mixture through the said section, for directing the gas-solution mixture at least initially at an angle acute to that of the direction of flow of the gas-solution mixture entering the said section: and

(c) a gas/liquid separation device in fluid communication with the outlet of the second contacting zone.



Compl. specn. 24 pages Drwg. 1 sheet)

Ind. Cl.[4] : 108 C_5 [GROUP XXXIII(5)] 170515

Int. Cl. : C 21 C 7/06.

A METHOD OF PRODUCING STEEL WITH REDUCED OXYGEN CONTENT.

Applicant : INLAND STEEL COMPANY, A DELAWARE CORPORATION U.S.A., OF 30 WEST MONROE STREET, CHICAGO, ILLINOIS 60603, U.S.A.

Inventors : 1. HOWARD M. PIELET
2. LARRY A. FRANK
3. WILLIAM EDGAR
4. MILAN ALAVANJA.

Application No. 910/Mas/87 filen on 21st December, 1987.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

5 Claims

A method of producing steel with reduced oxygen content comprising :

the steps of preparing molten steel in a steel refining furnace;

pouring said molten steel into a vessel to form a bath of molten steel, allowing a slag layer to form on the surface of the said molten steel bath;
diluting the said slag layer with at least one metal oxide such as herein described, thereby disrupting the equilibrium between the distributed oxide content in the slag layer and the dissolved oxygen in the said bath, and allowing to form molten steelslag layer interface in the bath and stirring the bath to reestablish an equilibrium between the oxide of slag layer and oxygen content of bath, thereby producing a molten steel bath having dissolved oxygen content in the range of 60 to 150 mg/kg (ppm) of the steel.

Compl. Specn. 23 pages. Drgs. Nil)

Ind. Cl. : 90 I [GROUP XXXVI] 170516

Int. Cl.[4] : C 03 C 17/30.

A PROCESS FOR MAKING A GLASS HAVING AN UNDERLAYER.

Applicants : PILKINGTON PLC, A BRITISH COMPANY, OF PRESCOT ROAD, ST. HELENS, MERSEYSIDE WA10 3TT, ENGLAND.

Inventors: MICHAEL STUARI JENKINS.
ANDREW FRASER SIMPSON.
DAVID ANTHONY PORTER.

Application No. 918/Mas/1987 filed on 22nd December, 1987.

Convention No. 8630918, dated 24th December, 1986; U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

9 Claims

A process for making a glass having an underlayer comprising directing onto the hot glass surface at a temperature of 600°C to 750°C a gaseous mixture of a silane, an unsaturated hydrocarbon compound such as herein described and carbon dioxide thereby depositing a transparent layer containing silicon and oxygen on the glass surface.

(Compl. specn. 26 pages No drgs.)

Ind. Cl. : 56 B [GROUP V] 170517

Int. Cl.[4] : C 10 G 45/62.

A PROCESS FOR SELECTIVELY PRODUCING MIDDLE DISTILLATE HYDROCARBONS BY HYDROCRACKING AND ISOMERIZING A FEED STOCK HAVING HEAVY HYDROCARBON OIL.

Applicant : CHEVRON RESEARCH COMPANY, A CORPORATION DULY ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 555 MARKET STREET, SAN FRANSISCO, CALIFORNIA; U.S.A.

Inventor : STEPHEN J. MILLER.

Application No. 927/Mas/87 filed on 23rd December, 1987.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

12 Claims

A process for selectively producing middle distlliate hydrocarbons by hydrocracking and isomerizing a feed stock having heavy hydrocarbon oil wherein at least 90% of said feed has a boiling point above about 600°F comprising :

(a) contacting under hydrocracking conditions said hydrocarbonaceous feed with a catalyst consisting a silico-aluminophosphate molecular sieve selected from the group SAPO-11 and SAPO-41, and at least one hydrogenation component selected from the group of platinum and palladium in an amount of 0.01 to 10% based on the weight of molecular sieve;

(b) recovering a hydrocarbonaceous effluent wherein more than about 40% by volume of said effluent has a bolting point between 300°F and 725°F and has a pour point below 0°F.

(Compl. specn. 31 pages Drgs. 1 sheet)

Ind. Cl. : 32-$F_2(_h)$—[GROUP-IX(1)] 170518

Int. C[4] : C 07 D 223/10.

AN IMPROVED PROCESS OF EXTRACTING CAPROLACTAM FROM CRUDE LACTAM.

Applicant : BASF AKTIENGELLSCHAFT, A GERMAN JOINT STOCK COMPANY ORGANISED AND EXISTING UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF 6700 LUDWIGSHAFEN, FEDERAL OF GERMANY.

Inventors : (1) UWE BRAND
(2) EMILE DeDECKER
(3) ERNST DEUKER
(4) HUGO FUCHS
(5) KLAUS KARTTE
(6) GERALD NEUBAUER
(7) JOZEF OOSTVOGELS.

Application No. 935/Mas/87 filed December 28, 1987.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Madras Branch.

2 Claims

In a process of extracting caprolactam from crude lactam the improvement comprising separating benzene or toluene from off-gases by :

(a) introducing the off-gases having a benzene or toluene content from 10 to 5,000 ppm at 10 to 100° into the base of a column;

(b) charging crude lactam having a water content from 10 to 40% by weight at 20° to 80°C to the upper part of the said column;

(c) recycling into the extraction stage, the acqueous lactam solution containing the dissolved benzene or toluene emerging from the bottom of the said column; and

(d) releasing scrubbed gas at the top of the column.

Compl. Specn. 6 pages. Drg. Nil.

Ind. Cl. : 32 F_1 [GROUP IX (1)] 170519

Int. Cl.[4] : C 07 C 17/24, 21/06.

AN IMPROVED PROCESS FOR THE PRODUCTION OF VINYL CHLORIDE BY THERMAL ELIMINATION OF HYDROGEN CHLORIDE FROM 1, 2-DICHLORO ETHANE.

Applicant : HOECHST AKTIENGESELLSCHAFT, D-6230 Frankfurt am Main 80, Federal Republic of Germany, Chemical Manufacturers, a corporation organized under the laws of the Federal Republic of Germany and UHDE GMBH, 10—15 Friedrich-Uhde-StraBe, D-4600 Dortmund, Federal Republic of Germany, an engineering company, a corporation organized under the laws of the Federal Republic of Germany.

Inventors : 1. GERHARD LINK
2. WALTER FROHLICH
3. REINHARD KRUMBOCK
4. GEORG PRANTL
5. IWO SCHAFFELHOFER.

Application No. 942/Mas/87 filed on 30th December, 1987.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

2 Claims

An improved process for the production of vinyl chloride by thermal elimination of hydrogen chloride from 1, 2-dichlorethane avoiding uncontrolled partial superheating of the gaseous 1, 2-dichloroethane in a cracking furnace with a radiation zone, the improvement comprising indirectly heating the vapours of 1, 2-dichloroethane obtained by boiling a solution containing at least 95% by weight of 1, 2-dichloroethane at a temperature of 170°C to 280°C to a temperature in the region of the cracking temperature by heat exchanging in a heat exchanger with hot vinyl chloride containing gas drawn from the radiation zone of the cracking furnace after pyrolysis and then feeding it into the cracking furnace.

(Compl. specn. 17 pages Drgs. 4 sheets)

Ind. Cl. : 166 B & 23 H [GROUPS LIII (2), XL (3)] 170520

Int. Cl.[4] : B 65 D 88/12.

A VACUUM INSULATED CONTAINER.

Applicant : DANBY DEVELOPMENTS INC. OF 1130 W. PENDER, STE. 1600 VANCOUVER, B.C., CANADA V6E 4A4. A BRITISH COLUMBIA CORPORATION.

Inventor : IAN R. McALLISTER.

Application No. 117/Mas/88 filed on 25th February, 1988.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch. Madras.

7 Claims

A vacuum insulated container, defining a containing area and having a longitudinal axis, a front end and a rear end, said container comprising :

(a) a first fluid tight outer side wall structure adapted to be exposed to ambient pressure;

(b) a second fluid tight inner side wall structure spaced inwardly from said outer side wall structure and defining said containing area;

(c) said first and second side wall structure defining therebetween a substantially evacuated insulating area to insulate said containing area from ambient heat transfer;

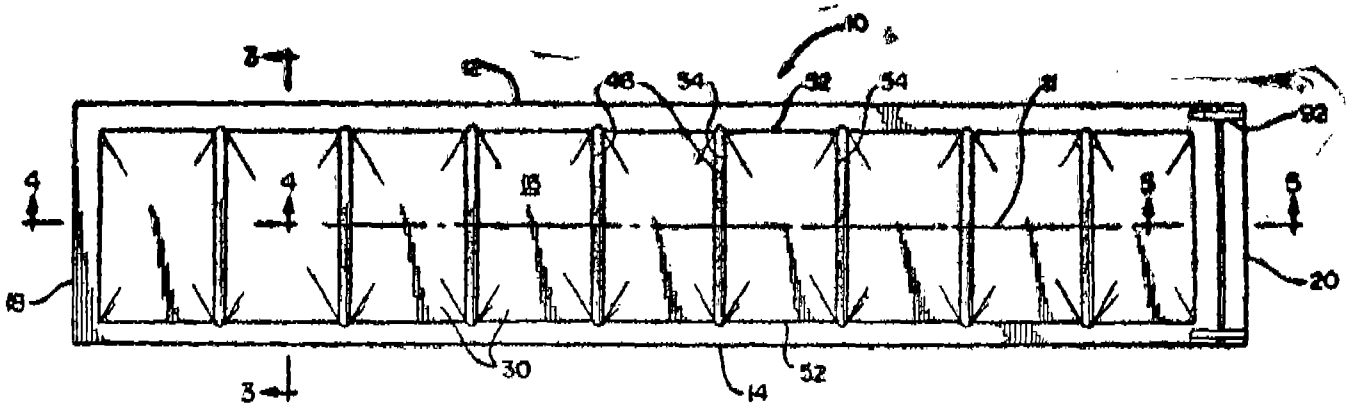
(d) said outer side wall structure comprising a plurality of side wall sections, each of said side wall sections comprising :

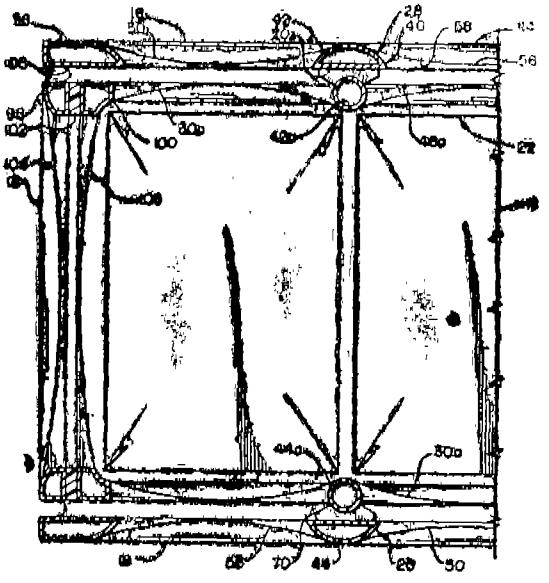
1. a perimeter frame defining a side wall section area;

2. a generally planar membrane section extending across said side wall section area and having main central portion and a perimeter portion attached to said perimeter frame;

3. the main central portion of the membrane section having an inwardly curved plane configuration, relative to said perimeter frame;

(e) a fluid tight rear end wall section comprising a rear outer wall section and a rear inner wall section which define therebetween a second substantially evacuated area, at least said rear inner wall section being connected to a rear end of the second inner sidewall structure so as to be movable therewith, said rear end of the second inner side wall structure and the rear inner wall section being mounted to be movable along said longitudinal axis relative to said outer side wall structure.





(Compl. specn. 37 pages Drgs. 4 sheets)

Ind. Cl. : 71 F, G [GROUP XXVIII (1)] 170521

Int. Cl.[4] : B 63 B 35/44.

SUSPENSION DEVICE FOR THE SUPPORT LEGS OF A JACK-UP OIL PLATFORM.

Applicant : 1. TECHNIP GEOPRODUCTION, TOUR TECHNIP-10 PLACE HENRI REGNAULT, 92000, PARIS LA DEFENSE (FRANCE), 2. ENGRENAGES ET REDUCTEURS CITROEN-MESSIAN-DURAND, 3 RUE LATECOERE, 78140 VELIZY VILLACOUBLAY, FRANCE.

Inventors : 1. THOMAS PIERRE-ARMAND
2. GRUNDMAN RAPHAEL.

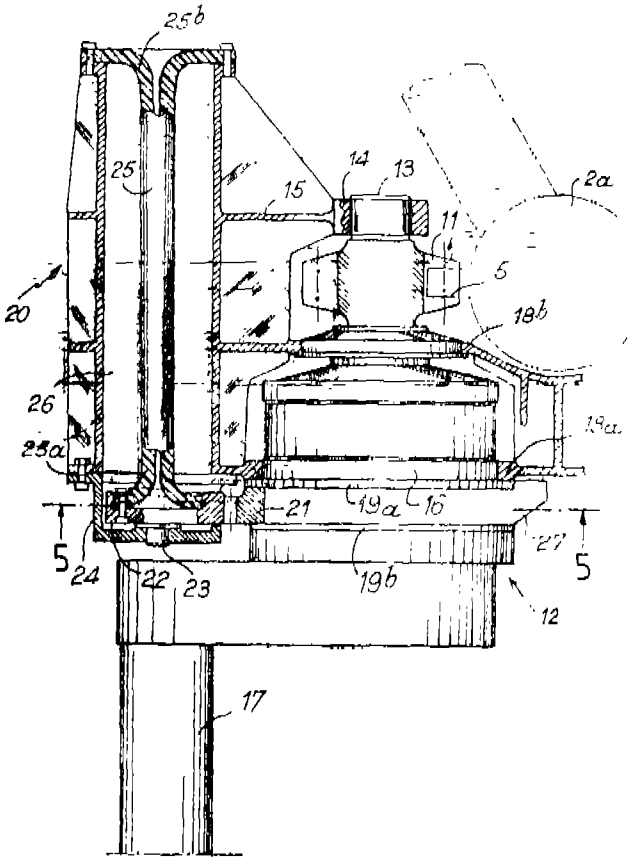
Application No. 812/Mas/87 filed on 10th November, 1987.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

10 Claims

A suspension device for the support legs of a jack-up oil platrolm comprising a hull movably mounted on the legs comprising a plurality of output gear pinions cooperating with racks mounted on at least a part of the

length of the legs, each of said output gear pinions being driven by an electric motor associated with a speed reducer pivotally mounted on a structure which carries them and is connected to the hull by at least one bearing allowing a given angular movement of said speed reducer and each corresponding output gear pinion, each said speed reducer of the driving mechanism cooperates with an energy absrober with at least one torsionally elastically yieldable support element connected to the corresponding speed reducer for a progressive absorbtion of the shock when the legs are placed on the sea bed.



(Compl. Specn. 14 pages Drgs. 8 sheets)

Ind. Cl. : 110 [GROUP XXI (2)] 170522

Int. Cl.[4] : D 04 B 15/32 & 15/20.

AN AUXILLARY DEVICE FOR WEFT KNITTING MACHINE.

Applicant : THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION, COIMBATORE AERODROME P.O. COIMBATORE 641 014, TAMIL NADU, INDIA, A SOCIETY REGISTERED UNDER THE SOCIETIES REGISTRATION ACT, 1860.

Inventors : 1. TARAKAD VEDAMURTHY RATNAM
2. SENNIMALAI GOUNDER RAMASWAMY
3. PALANISWAMY MUTHUKUMARASWAMY.

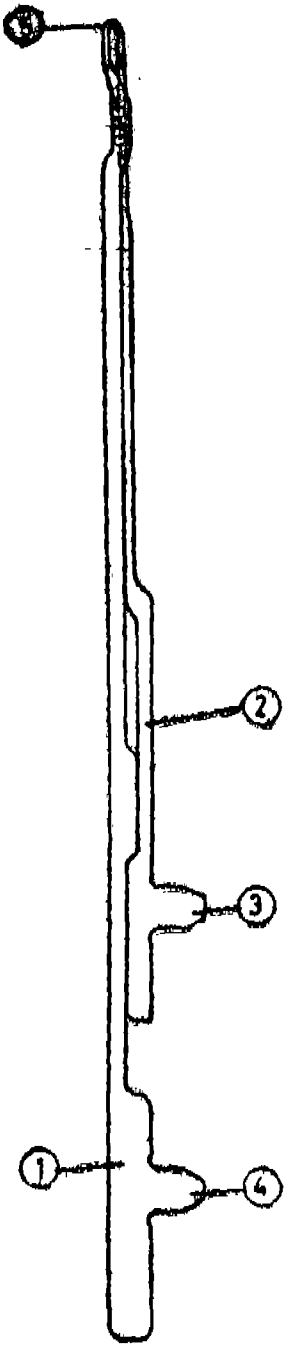
Application and Provisional specification No. 857/Mas/87 filed on 30th November 1987.

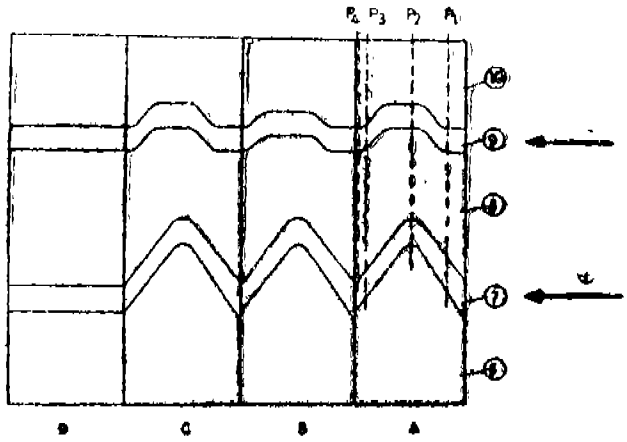
Complete specification left on 28th February, 1989.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

2 Claims

An auxiliary device for weft knitting machine, comprising a linear cam and a loop forming element (1), the said cam having a plurality of linear profiles (6, 8, 10) the said loop forming element (1) being provided with a hook (5) at one end and a butt (4) at the other, a hook closing element (2), one end of which is in contact with the said hook (5) and the other end being provided with a butt (3), the butt (4) of the loop forming element (1) and the butt (3) of the hook closing element (2) engaging slidably with the different profiles of the said cam.





(Prov. specn. 9 pages;

Compl. Specn. 11 pages Drgs. 2 sheet.)

Ind. Cl. : 107 G [GROUP XLVI (2)] 170523

Int. Cl.[4] : F 01 N 3/24.

A TWO STROKE MACHINE.

Applicant : INSTITUT FRANCAIS DU PETROLE, A FRENCH BODY CORPORATE, OF 4TH AVENUE DE BOIS-PREAU, 92502 RUEIL-MALMAISON, FRANCE.

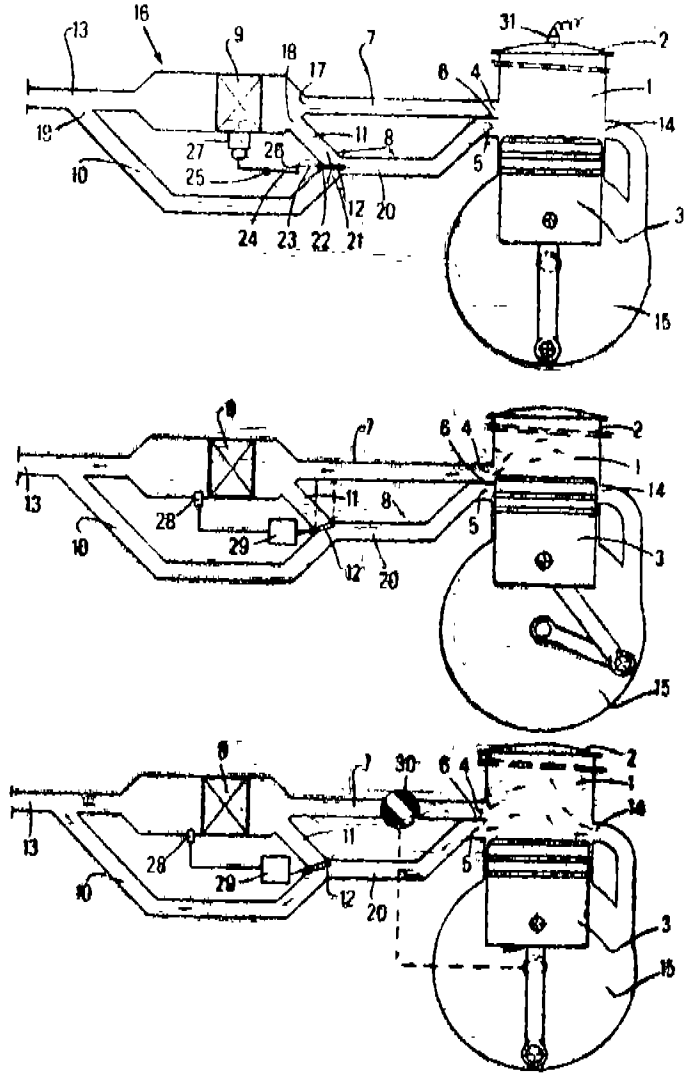
Inventors : PIERRE DURET.

Application No. 915/Mas/87 filed on 22nd December 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

7 Claims

A two stroke engine having at least one cylinder head, a cylinder and a catalytic muffler or pot, said pot comprising a known catalyst for treating the exhaust gases, said cylinder having at least two exhaust openings or ports offset with respect to each other in the axial direction of the cylinder, a first duct connecting one of said ports which is closest to the cylinder head, or first port, to point upstream of said catalyst, a second duct connecting the other port to upsteam of said catalyst, a bypass duct connecting a point of said second duct to a point downstream of said catalyst and a distribution member positioned at the junction of the bypass duct with the second duct, said distribution member being adapted for distributing the gas coming from said second port upstream and downstream of said catalyst.



(Comp. Specn. 12 pages Drgs. 1 sheet.)

Ind. Cl. : 40-A_1—[GROUP-IV(I)] 170524

Int. Cl.[4] : B 01 J 19/24

A DEVICE FOR CONVEYING SEPARATELY AT LEAST TWO GASES AS FAR AS A MIXING ZONE.

Applicant : INSTITUT FRANCAIS DU PETROLE, A FRENCH BODY CORPORATE OF 4, AVENUE DE BOIS-PREAU, 92502, RUEIL-MALMAISON, FRANCE.

Inventor : EMMANUEL GOLDENBERG.

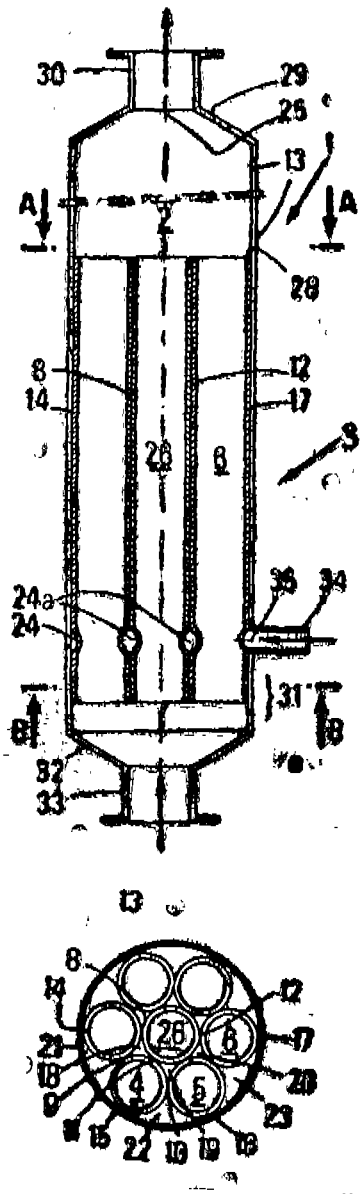
Application No. 921/Mas/87 filed December 22, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

6 Claims

A device for conveying separately at least two gases as far as a mixing zone comprising several tubes, means for supplying these tubes with the one of the gases, means for holding said tubes together in a predetermined position with respect to each other, defining empty spaces or intertube

gaps, and at least some of said tubes having narrowed zones placed substantially at the same level forming a network for distributing the other gas to the said intertube gaps.



(Comp. Specn. 12 pages Drgs. 1 sheet)

Ind. Cl. : 32-F3(c)—[GROUP-IX(1)] 170525

Int. Cl.[4] : C 12 P 7/14

AN APPARATUS AND A PROCESS FOR THE PRODUCTION OF ALCOHOL BY CONTINUOUS FERMENTATION OF A MUST IN FERMENTERS ARRANGED IN A CASCADE.

Applicant : SOCIETE DES PRODUITS NESTLE S A, A COMPANY INCORPORATED IN SWITZERLAND, OF CASE POSTALE 353, 1800 VEVEY, SWITZERLAND.

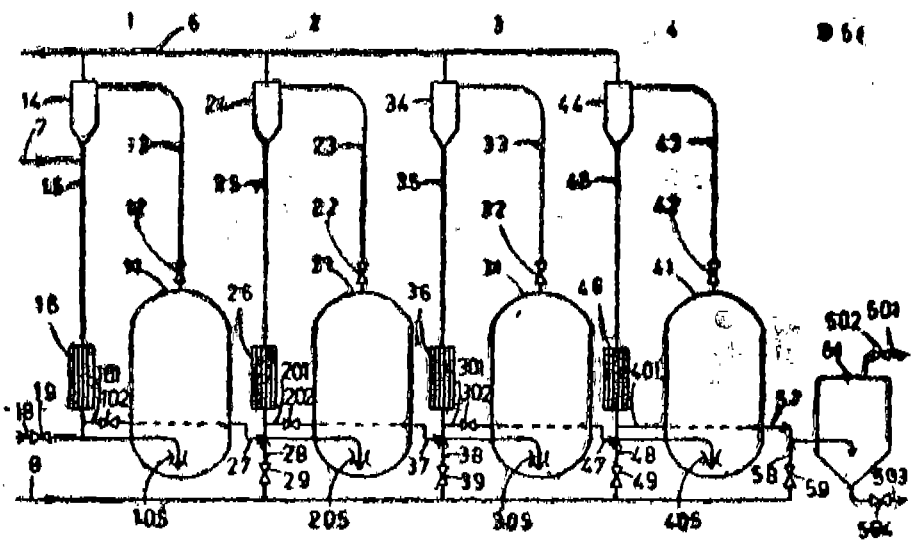
Inventor : KALINA VLADIMIR.

Application No. 931/Mas/87 filed December 28, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

5 Claims

An apparatus for the continuous production of alcohol comprising a plurality of fermenters arranged in a cascade, charterized in that a plurality of circulation fermenters (1, 2, 3, 4) and a decanter (5) being arranged in a cascade, each circulation fermenter consists of a fermentation vat, (11, 21, 31, 41) a counter-pressure valve (12, 22, 32, 42) at the top of the vat, an airlift pump (13, 23, 33, 43) above the counter-pressure valve and a return pipe (15, 25, 35, 45) connecting the top of the airlift pump to the lower part of the vat, the first fermenter (1) having means (7) for introducing gas into the upper part of said return pipe (15) and each fermenter having means for introducing fresh (18, 28, 38, 48) and/or transferred (27, 37, 47) must and means for transferring (101, 201 301) fermented must connected to the lower part of said return pipe, the decanter (5) has a decantation vat (51) under pressure connected at its top to a pipe (501) for the removal of fermented must and, at its base, to a pipe (503) for emptying decanted yeast, the means (401) for transferring fermented must of said last fermenter (4) being connected to means (57, 58) for introducing fresh and/or transferred must connected to the lower part of the decantation vat (51).



(Comp. Specn. 16 pages Drgs. 1 sheet)

Ind. Cl. : 32 D [GROUP IX (1)] 170526

Int. Cl.[4] : C 07 F 7/16

AN IMPROVED PROCESS FOR PRODUCING ALKYLHALOSILANES.

Applicant : DOW CORNING CORPORATION, OF 3901, S. SAGINAW ROAD, MIDLAND, MICHIGAN 48640-0994, U.S.A., A U.S. COMPANY.

Inventors : 1. HALM ROLAND LEE, (2) WILDING OLIVER K. JR.

Application No. 932/Mas/87 filed on 28th December, 1987.

Convention dated 19-11-1987 No. 552215 (Canada).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch Madras.

7 Claims

An improved process for producing alkylhalosilanes comprising the steps of reacting an alkylhalide with silicon at a temperature of from 250 to 350 degrees C in the presence of a catalyst selected from tin or tin compounds, copper or copper compounds and zinc or zinc compounds, the improvement comprising introducing a non-violatile phosphorus compound in the silicon during the silicon refining stage to maintain a phosphorus content of 25 to 2500 parts per million in the silicon reacted with the alkylhalide.

Comp. Specn. 21 pages Drgs. Nil

Ind. Cl. : 32 D [GROUP IX (1)] 170527

Int. Cl.[4] : C 07 E 7/16

AN IMPROVED PROCESS FOR THE MANUFACTURE OF ALKYLHALOSILANCES.

Applicant : DOW CORNING CORPORATION, OF 3901 S. SAGINAW ROAD, MIDLAND, MICHIGAN 48686-0994, U.S.A., U.S. Company.

Inventors : 1. DOSAJ VISHU DUTT, (2) HALM ROLAND LEE, 3. WILDING OLIVER K. JR.

Application No. 933/Mas/87 filed on 28th December, 1987.

Convention dated 19-11-1987 No. 552212 (Canada).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch Madras.

16 Claims

An improved process for the manufacture of alkylhalosilanes comprising the steps of reacting an alkylhalide with silicon at a temperature in the range of from 250 to 350 degrees C in the presence of a catalyst selected from tin or tin compounds copper or copper compounds and zinc or zinc compounds, the improvement comprising introducing a phosphorus promoter during the manufacture of the silicon at the smelting stage to maintain the phosphorus content in the silicon in an amount of from 25 to 2500 parts per million in the silicon reacted with the alkylhalide.

Comp. Specn. 19 pages Drgs. Nil

Ind. Cl. : 32-B-[GROUP-IX(1)] 170528

Int. Cl.[4] : C 07 C 2/12, 2/42

PROCESS FOR PRODUCING UPGRADED LIGHT OLEFINS SUCH AS HYDROCARBONS RICH IN C_4 + ALIPHATICS AND AROMATICS.

Applicant : MOBIL OIL CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK, U.S.A., OF 150 EAST 42ND STREET, NEW YORK, NEW YORK 10017, U.S.A.

Inventors : (1) AMOS ANDREW AVIDAN (2) TAI-SHENG CHOU (3) HARTLEY OWEN (4) JORGE LUIS SOTO (5) SAMUEL ALLEN TABAK.

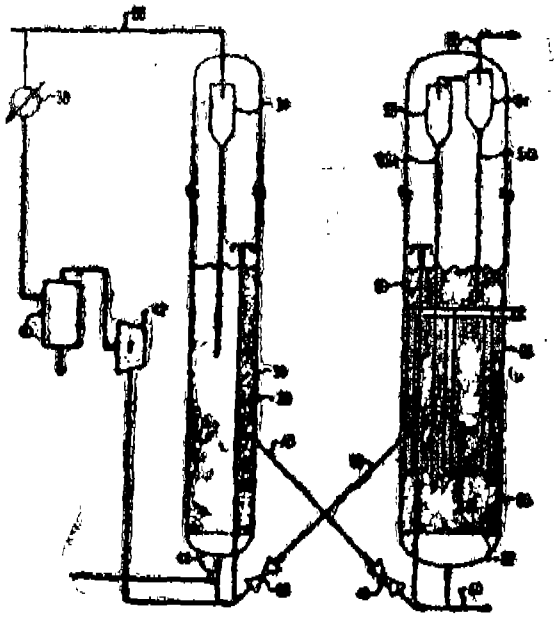
Application No. 941/Mas/87 filed December 30, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

5 Claims

A process for producing upgraded light olefins such as hydrocarbons rich in C_4+ aliphatics and aromatics in a turbulant fluidized catalytic bed reactor from a light olefinic feedstock containing at least 2 mol% ethane and a total C_2 to C_3 alkene content of upto 40wt % comprising the steps of : passing heated light olefinic gas feedstock upwardly through the fluidized catalytic bed of the turbulant fluidized catalytic bed reactor in a single pass at a pressure in the range of 410 to 2500 kPa and at a temperature in the range of 315 to 510°C, the catalyst being a particulate zeolite having a silica : alumina molar ratio in the range of 20 : 1 to 200 : 1, an apparent particle density of 0.9 to 1.6 g/cm^3, a size range of 2/0 to 100 microns, and an average catalyst particle size of 20 to 100 microns containing 10 to 25 weight percent offine particles having a particle size of less than 32 um;

maintaining turbulant fluidized catalytic bed conditions at a superficial feed stock velocity of 0.3 to 2 meters per second through the reactor bed having an average, fluidized bed density in the range of from 300 to 500 kg/m^3 measured at the bottom of the reaction zone and recovering in a known manner hydrocarbon product containing a major amount of C_4+ hydrocarbon at least 6% isobutane, propane and propene in a ratio in the range of from 0.2 : 1 to 5 : 1, in a known manner.



Comp. Specn 23 pages Drgs. 3 sheets of size 33.00 cms. by 41.00 cms.

Ind. Cl. : 187 C_3 [GROUP LXI (2)] 170529

Int. Cl.[4] : H 04 L 5/00

A TRUNKED VOICE/DATA COMMUNICATION SYSTEM.

Applicant : MOTOROLA, INC., A CORPORATION OF THE STATE OF DELAWARE, OF CORPORATE OFFICE, 1303 EAST ALGONQUIN ROAD, SCHAUMBURG, ILLINOIS 60196, UNITED STATES OF AMERICA.

Inventors : 1. KENNETH JOHN ZDUNEK 2. STUART WELLS THRO.

Application No. 60/Mas/88 filed on 29th January, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch Madras.

2 Claims

A trunked voice/data communication system, comprising :

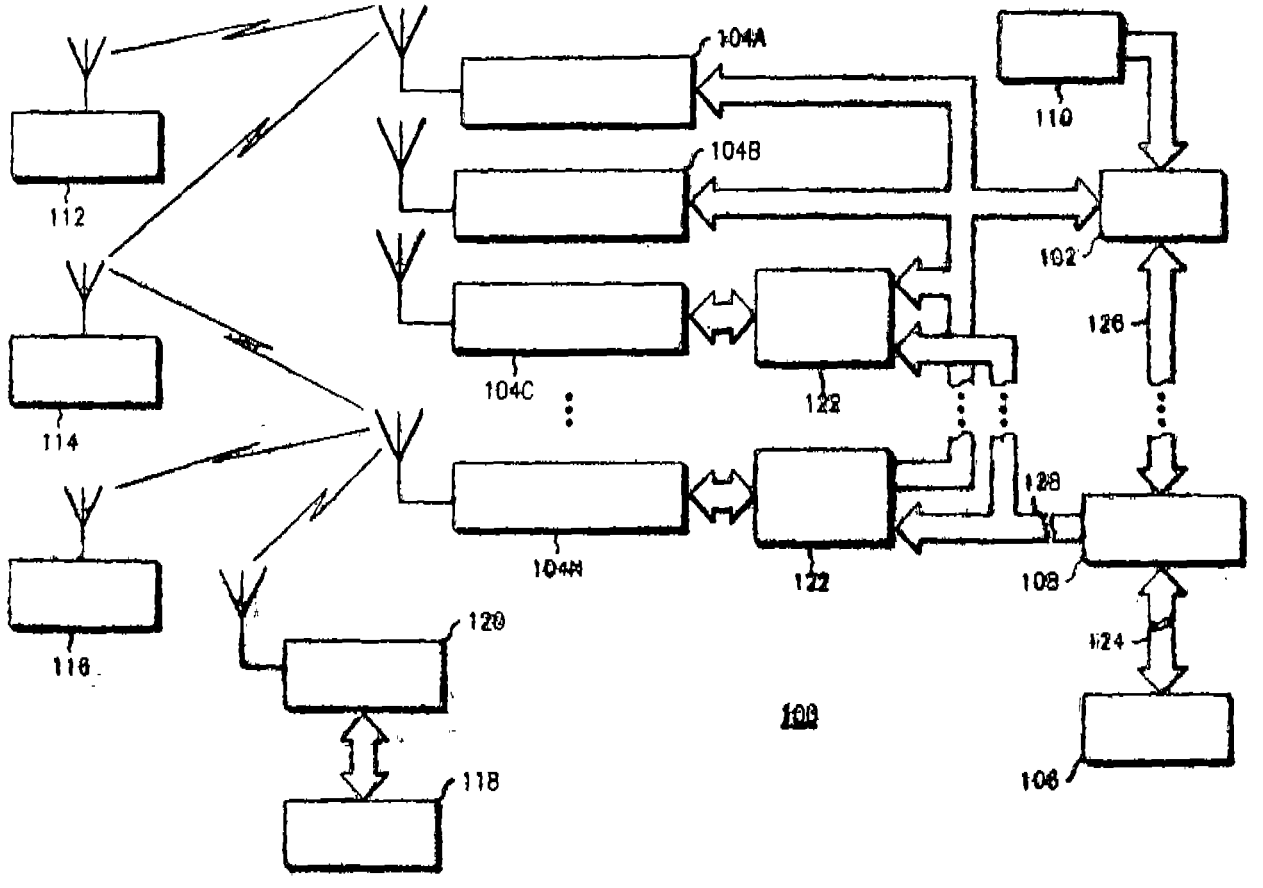
a plurality of repeaters, at least one of which is constructed and arranged to transceive data information;

a plurality of subscriber units constructured and arranged to communicate information on an assigned repeater in either a voice mode or a data mode;

at least one central controller coupled to each of said plurality of repeaters, for allocating said plurality of repeaters among said plurality of subscriber units;

a network controller, coupled to said central controller and said at least one of said plurality of repeaters constructed and arranged to transceive data, for controlling data information transfers and

at least one computer, coupled to said network controller, for communicating with any of said plurality of subscriber units operating in said data mode.



Comp. Specn. 22 pages : Drgs. 11 sheets

Ind. Cl. : 5 C & D [GROUP I(1)] 170530

Int. Cl.[4] : A 01 D 41/00 & 45/00

APPARATUS FOR CARRYING OUT DIRECTLY IN THE FIELD THE DECORTICATION OF PLANTS WHICH ARE RICH IN LONG FIBRES.

Applicant : GARDELLA IMPIANTI SISTEMI INDUSTRIALI S.P.A., AN ITALIAN COMPANY OF VIA F CANEPA, 140; 16010 SERRA RICCO, GENOVA, ITALY.

Inventor : LUIGI PEZZOLI.

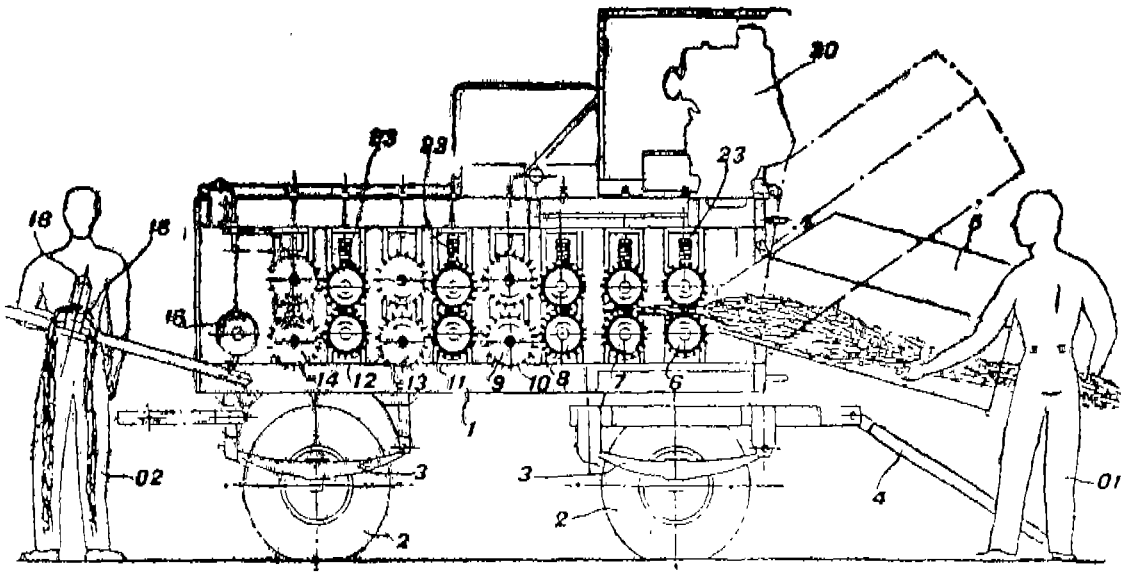
Application No. 106/Mas/88 filed on 19th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch Madras.

13 Claims

Apparatus for carrying out directly in the field the decortication of plants which are rich in long fibres (such as hemp, jute, kenaf and the like), characterised in that it comprises in succession—on a strong chasis of steel tubes which is mounted movably on wheels by way of resilient suspensions and which is intended to be drawn in the field—members for supplying, working and discharging the plants, respectively comprising a tiltable feeder hopper, a plurality

of pairs of working cylinders, a delivery roller and a discharge device, as well as a motor for producing the rotary movment of said pairs of cylinders and said roller by way of transmission means.



Comp. Specn 10 pages Drgs. 2 sheets

OPPOSITION PROCEEDINGS

An Opposition has been entered by Kinetic Engineering Limited, Pune, Maharashtra, India to the grant of a patent on application No. 169241 made by the Bajaj Auto Limited, Pune, Maharashtra.

PROCEEDING UNDER SECTION 20 (1)

Claim made by Mitsui Toatsu Chemicals, Incorporated and Kunary Company Ltd. under Section 20 (1) of the Patent Act 1970 to proceed the application for Patent No. 169056 in their name as Joint applicant by virtue of merger has been allowed.

PATENT SEALED ON 6th MARCH, 1992

168109 168206 168243 168254 168301* 168303 168305 168306* 168310 168311 168316 168318 168327 168341* 168344 168346* 168388* 168389 168391 168392 168393 168508* 168509 168565* F

Cal-12, Del-12, Mas-Nil, Bom-Nil.

*Patents shall be deemed to be endorsed with the words "LICENCE OF RIGHT" under section 87 of the Patents Act, 1970 from the date of expiration of three years from the date of Sealing.

F-FOOD Patents.

AMENDMENT PROCEEDINGS UNDER SECTION 57

Notice is hereby given that The Plessey Company Limited (formally known as the Plessey Company Plc.) a British company of Vicarage Lane, Ilford, Essex 1G1 4 AQ, England have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for Patent No. 168441 for "Security device for a telecommunications exchange system."

The application for amendment and the proposed amendments can be inspected free of charge at patent Office, 234/4, Acharya Jagadish bose Road, Calcutta-700 017, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification at the Patent Office, Calcutta. If the Written Statement of Opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice.

Notice is hereby given that SCIMAT LIMITED, a company organised according to the Laws of the United Kingdom formerly of 16 St. Martina-le-Grand, London EC1A4WJ, United Kingdom, but now of Lennox House, Spa Road, Gloucester, England, have made an application under Section 57 of the Patents Act, 1970, for amendment of a application and specification of their application for Patent No. 608/MAS 87 (170214) for A METHOD OF MANUFACTURING A PLUGGED MICROPOROUS FILM.

The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on the prescribed Form-30 within 3 month from the date of the Notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

Notice is hereby given that SOCIETE DES PRODUITS NESTLE S. A. CASE POSTALE 353, 1800 Vevey Switzerland, a company incorporated in Switzerland, have made an application under Section 57 of the Patents Act 1970, for amendment of application and specification of their application for Patent No. 740/MAS/89 (170300) for "A PROCESS FOR THE PRODUCTION OF A HYDROLYSED PROTEIN".

The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on the prescribed Form-30 within 3 months from the date of the Notification at the Patent Office, Madras-1. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

Notice is hereby given that State of Israel represented by the Prime Minister's Office, THE ISRAEL INSTITUTE FOR BIOLOGICAL RESEARCH, of POB 19, Ness-Zione, Israel have made an application under Section 57 of the Patents Act, 1970, for amendment of application and specification of their application for Patent No. 455/MAS/90 (170320) for A PROCESS FOR PREPARING SPIRO-OXATHIOLANE/QUINUCLIDINE COMPOUNDS.

The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on prescribed Form-30 within 3 months from the date of the Notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition, it shall be left within one month from the date of filing the said Notice.

Notice is hereby given that FLAKT AB a Joint Stock Company organised under the Law of Sweden, of Sickla Alle 13, Nacka, Sweden have made an application under Section 57 of the Patents Act, 1970, for amendment of application and specification of their Application for Patent No. 708/MAS 87 (170352) for AN APPARATUS AND PROCESS FOR PRODUCING PURIFIED GAS FROM GAS CONTAINING SOLID, LIQUID AND/OR GASEOUS CONTAMINANTS.

The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition in the prescribed Form-30 within 3 months from the date of the Notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

COMMERCIAL WORKING OF PATENTED INVENTIONS ELECT ENGG. LIST NO. I

The following patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of the Patents Act, 1970 in respect of calendar year 1990 generally on account of want of request for licences to work the patented invention, persons who are interested to work the said patents commercially may contact the Patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of Patentee	Title of the Invention
161036	28-7-1983	Adrian March Ltd. 7 Argyle close, whitehall, Bordon, Hampshire GU35, 9PU, England.	Position sensor.
153140	13-11-1980	Asahi Glass Co. Ltd., No. 1-2 Marunouchi, 2-chome, Chiyoda-ku, Tokyo, Japan.	An improved process for electrolyzing and an ion exchange membrane call for carrying it out.
155085	13-11-1981	Do.	Alkali metal chloride electrolyzing cell.
157592	16-4-1982	Do.	Improved filter press type electrolytic cell.
162001	13-7-1983	Asahi Glass Company, of 1-2, Marunouchi, 2-chome, dhiyoda ku, Tokyo, Japan.	Process for producing a cathode having high durability and low hydrogen over voltage.
161390	15-11-1983	Asahi Kasei Kogyo Kabushiki Kaisha.	An improved hydrogen-evolution electrode and a method of producing the same.
161949	18-6-1984	Asahi Kasei Kogyo Kabushiki Kaisha, of 2-6, Dojimhama, 1, chome, kita ku, Osaka-shi, OSAKA, Japan.	Process for seperating borate ions from Aqueous solution by absorption.
162105	29-10-1983	Asea-Jumet, Societe, Anonyme, of Zoning Industrial, B, 6040, Charleroi-Jumet, Belgium.	A method of manufacturing an auto-regenerable capacitor manufactured by that method.
157611	5-10-1982	British Railways Board, 222, Marylebone Road, London, N.W. 1, England.	Control system for controlling the passage of vehicles.
159609	7-1-1982	CEM-Compagnie Electro Mecanique, of 12 rue portalis, F-75008, Paris, France.	Sliding field inductor with oriented flux for agitation rollers in the continuous casting of slabs.
147919	19-4-1978	CHUGAI DENKI KOGYO, KABUSHIKI KAISHA, 13/3 Nihonbashi-kayabacho, 2-chome, chuo-ku, Tokyo, Japan.	A method of making improved Ag-metal oxides electrical contact materials.
156490	21-5-1982	Chugai Denki Kogyo Kabushiki Kaisha.	Method of preparing improved electrical contacts made of silver alloy.

1	2	3	4
147069	22-12-1976	Contraves A.G. Schaffauserstrasse, 580, 8052, Zurich, Switzerland.	A combination of a vehicle and an electrical power generating set.
152705	16-6-1980	Contraves Italiana, S.P.A. Via, Affile, 102-00131, Rome, Italy.	An integrated radar antenna array.
162750	3-1-1987	Energy conversion Devices Inc., 1675 West Maple Road, Troy, Michigan 48084 U.S.A.	A flat panel display.
163310	31-1-1984	Energy Conversion Devices. Do.	Multilayered electronic memory arrays for use in data storage apparatus.
156735	20-4-1983	Evans Adlard & Co. Ltd., Posllip Mills, Winchcombe, cheltenham, Gloucestershire GL 54, 5BB, England.	Glass fibre paper separator for electrochemical cell and electro chemical cell comprising the same.
158642	22-4-1983	Fisher Controls International. Inc. 7711 Bonbomme, clayton, Missouri 63105, U.S.A.	System for controlling the mechanical position of a controlled device.
150739	13-12-1978	Holec Systemen En. Components B.V. Tundorpstreat 61, 7555, CS. Hengele C.V. Netherlands.	Three phase vacuum switch or like for interrupting an unductive load in a three phase high voltage network.
160332	22-2-1984	Hughes Aircraft Co. 200 North Sepulveda, Fl, Segundo, Cali Fornia, 90245, USA.	A dual path optical sensor system.
162453	21-1-1985	Hughes Aircraft Co., 7200 Hughes Jerrace, P.O. Box 45066 Los Angeles, California-90045-0066, California-90045.	Non volatile semi conductor memory unit.
162858	18-4-1985	Do.	Method for in capsulating and impregnating article such as electrical components.
157163	14-7-1981	ICI LTD., Imperial Chemical House, Mill bank, London SWIP 3JF, England.	Electrode for use in electrolytic cell.
158899	8-2-1983	Imperial chemical Industries Plc., Do.	A method of manufacturing an electrolytic cell.
159462	7-5-1983	Do.	Electrolytic cell containing gasket having projections and/or recesses.
159902	9-11-1982	Imperial Chemical Industries Plc.	Electrolytic cell of the filter press type.
160013	6-6-1983	Do.	A porous sheet diaphragm of an organic polymeric material for an electrolytic cell and the method of preparation thereof.
160767	7-3-1984	Do	Electrolytic cell.
154480	30-10-1981	Jeumont-Schneider 31-32 Quai De Dion Bouton, 92811, Puteaux cedex, France.	A control circuit for a direct current motor during traction or braking.
160826	16-9-1983	Jeumont-Schneider 31-32, Quai De Dion Bouton, 92811, Puteaux, Cedex, France.	Control circuit of a synchronous motor with two induced windings.
159772	16-6-1984	Kerala State Electronics, Development Corpn. Ltd., Keltron House, Vellayambalam, Trivandrum 695001, Kerala, India.	A magnedyne encoder.
163368	23-2-1985	Kerala State Electronics Develop. Corpn. Ltd.,	An inductive card reader.
160983	15-1-1983	La Telemec' anique Electrique, 33 Bis, Et 33 Ter, Avenue Du Marechal-Joffre, 92002, Nanterre, Cedex, France.	An electro-magnet equipped with a moving system including a permanent magnet and designed for monostable operation.
159475	1-3-1983	Manchester R & D, Partnership, 27-31, Emerson Drive, Pepper, Pike, Ohio 44124, U..S.A.	Liquid crystal display device for use with electro-optic apparatus.
153538	28-2-1981	Mitsubishi Denki, Kabushiki, Kaisha, No. 2-3, Marunouchi, 2-chome, chiyoda-ku, Tokyo, Japan.	A puffer type gas circuit breaker.
155798	27-4-1982	Mitsubishi Denki kabushiki kaisha, 2-3, Marunouchi- 2-cho e, Chiyodaku, Tokyo, Japan.	Method of producing an electrically insulated conductive body.

1	2	3	4
156140	7-4-1982	Mitsubishi Denki Kabushiki Kaisha, No. 2-3, Marunouchi, 2-chome, chiyoda-ku, Tokyo, Japan.	Arc-suppressing apparatus for circuit breaker.
156143	24-1-1983	Mitsubishi Denki Kabushiki Kaisha, Do.	Air circuit breaker.
156392	30-3-1982	Mitsubishi Denki kabushiki kaisha, No. 2-3, Marunouchi, 2-chome, chiyoda-ku, Tokyo, Japan.	Terminal connecting device.
156473	14-4-1982	Do.	Drawer-type circuit breaker.
156898	27-7-1982	Mitsubishi Denki kabushiki kaisha.	Input converting circuit.
157465	24-1-1983	Do.	Air circuit breaker.
157572	24-1-1983	Do.	Air circuit breaker.
157722	24-1-1983	Do.	Air circuit breaker.
161010	29-7-1982	Mitsubishi Denki Kabushiki kaisha, No. 2-3, Marunouchi, 2-chome, Chiyoda-ku, Tokyo, Japan.	A terminal apparatus for a dralwer type relay.
154892	20-3-1980	Mitsubishi Rayon co. Ltd., 3-19, Ayobashi, 2-chome, chuo-ku, Tokyo, Japan.	A dielectric polypropylene film for oil-immersion type electrical appliances and a method of producing the same.
158640	16-4-1983	Outokumpu of outokumpu, Finland.	An electric furnace intended for smelting or heating.
153847	26-12-1980	Permelec Electrode Ltd., No. 2-5, Kasumigaseki, 3-chome, chiyoda-ku, Tokyo, Japan.	Electrolysis apparatus using a diaphragm of a solid polymer electrolyts and method for production thereof.
151437	31-5-1979	Rosemount Inc. 12001, West 78 th Street, Eden, Prairie, State of Minnesota, U.S.A.	Two wire current transmitter with improved voltage regulator.
154802	1-10-1981	Rose mount Incorporated, 12001 West 78th Street, Eden Prairie, Minnesota 55344, USA.	Capacitive pressure transducer with isolated sensing diaphragm.
156305	22-1-1982	Resemount Incorporated.	Circuit for measuring the reactance of an Ac reactance.
155849	25-1-1982	Societe Nationale Industrielle Aerospatiale 37, Boulevard de, Montmorency, 75016, Paris, France.	Aerial simulator for ground illumination by means of electromagnetic pulse adapted for determination of the dielectric constant and conductivity of a selected ground.
153736	27-1-1981	Sulzers Brothers Limited, CH-8401, Winterthur, Switzerland.	A method of producing magnesium from a magnesite or dolomite.
145774	15-7-1977	Union carbide India Limited, 1, Middleton Street, Calcutta-700 071, West Bengal, India.	Electric flashlight.
146566	12-12-1977	Union carbide India Ltd., 1, Middleton street, Calcutta-700 071, West Bengal, India.	Dry battery operated lighting means which automatically came into operation when the mains power is cut off.

1	2	3	4
149030	24-2-1979	Union carbide India Limited, 1, Middleton Street, Calcutta-700 071, West Bengal, India.	An improved electric flashlight.
151999	22-5-1981	Do.	Metal cap for exposed top of carbon electrode of a dry cell and an improved dry cell incorporating same.
153168	26-5-1981	Do.	Improved filferproof dry cell.
153608	16-10-1980	Do.	Improved push button switch.
154805	25-3-1983	Do.	Dry cell torch with adjustable focussing head.
154976	1-3-1983	Do.	Improved water proof flashlight.
157812	19-5-1983	Do.	Improvements in or relating to stock batteries.
148981	24-4-1978	Ushio, Denki, kabushiki kaisha, 6-1, ole-machi, 2-chome, Ashahi-Tokai Building, 19-Floor, Chiyoda-ku, Tokyo, Japan.	Rare gasdischarge lamp.
148982	24-4-1978	Ushio Denki Kabushiki Kaisha.	Discharge lamp.

COMMERCIAL WORKING OF PATENTED INVENTIONS

CHEM. ENGG. LIST NO. I

The following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of the Patents Act, 1970 in respect of calender year 1990 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a license for the purpose.

Patent No.	Date of Patent	Name and Address of the Patentee	Title of the Invention
1	2	3	4
164100	2-9-1986	Adolf WYLER Oleienaller 17, 1081 HJ Amsterdam, The Netherlands, Herbert J. WAGNER, 25 Radbrook, Great Neck, N.Y. 11024, U.S.A.	Process for producing a thermoplastic leather material.
158548	27-8-1984	American Home Products Co. 685, Third Avenue, New York N.Y. 10017, U.S.A.	Process for the preparation of Penicillinamidase dialdehyde adduct.
159585	27-8-1984	Do.	Process for the preparation of 6-aminopenicillanic acid.
163091	9-3-1983	APACE RESEARCH LTD. 130, Dowling street, Dungog, New South Wales Australia.	Emulsions of liquid hydrocarbons with water and/or alcoholsu and method of producing the same.
158128	31-3-1983	Asahi Glass Co. Ltd. 1-2 Marunouchi, 2-chome, chiyoda-ku, Tokyo, Japan.	An improved process for recovering ammonia from ammonium chloride.

1	2	3	4
152793	5-6-1980	Asahi Kasei Kogyo Kabushiki Kaisha 2-6, Kohimahama, 1-chome, Kita-ku Osaka-shi, Japan.	Fluorinated cation exchange membrane and process for preparing the same.
153146	12-12-1980	Do.	Separation of rare earth metals.
153451	1-12-1980	Do.	Process for producing fluorinated cation exchange membrane.
154418	1-12-1980	Do.	Process for preparing novel fluorinated cation exchange membrane.
154593	11-11-1980	Do.	An improved process for producing a viscase rayon filament yarn and viscase rayon filament yarn thereby produced.
156691	23-12-1981	Do.	A process for the separation of elements by chromatography.
160816	30-6-1983	Do.	Process for the production of polyhexamethylene adipamide fibers.
149600	21-1-1980	Ashok Ranjan Das Gupta C/o Eastern carbons, 'Sneh-Milan' Telephone Exchange Road, Dhanbad-826001, Bihar.	Process for producing special quality low ash metallurgical coke.
153750	20-10-1981	Do.	Improvement in a process for the production of special quality low ash metallurgical coke.
153648	13-1-1981	Battelle Development Corporation 505 King Avenue, Columbus, Ohio 43201, USA.	A method of producing a reaction gas having a low content of nitrogen oxides and sulfur dioxide from the combustion of hydrocarbons in a multisolid fluidized bed having a lower dense fluidized bed.
157882	18-3-1982	Bergwerksverband Gmbh. Franz-Fischer-Weg 61, 4200, Essen 13, West Germany.	Method for the production of H_2 and containing gases.
153014	6-11-1980	Bethlehem Steel Corporation Bethlehem, Pennsylvania 18016, USA.	A method of producing a metallic coated ferrous base product.
153015	6-11-1980	Do.	A method of producing a thermally treated metallic coated ferrous base product.
154256	15-12-1980	Do.	A process for making a ductile composite metal product.
160994	14-6-1983	Do.	A method for producing a metallic coating metallurgically bonded to a ferrous base.
147318	17-3-1978	THE BF GOODRICH COMPANY of 277 Park Avenue, New York, New York10017 U.S.A.	A process of making polymerization reaction vessel for eliminating the build up of polymers on the internal surfaces.
149350	17-4-1979	Do.	Suspension polymerisation process for producing polymers of vinyl and vinylidene halides and copolymers.
150326	22-5-1979	Do.	Process for coating polymerization reaction vessel using steam application.
150668	9-10-1979	Do.	Improvements in or relating to polymerisation reactions and polymerisation reaction vessel therefore.
151231	13-11-1978	Do.	Process for the polymerization of vinyal chloride.
151347	9-10-1979	Do.	A process for polymerization of manomer.

1	2	3	4
151750	7-4-1980	THE BF GOODRICH COMPANY of 277 Park Avenue, New York, New York 10017 U.S.A.	Coating polymerization reactors with the reaction products of thiodiphenols and a bleach.
151754	15-5-1981	Do.	Process for producing spherical and porous vinyl resin particles.
151951	24-10-1980	Do.	Improved method for the preparation of alumina supported copper catalyst compositions for fluid bed hydrocarbon oryhydro chlorination.
152167	28-10-1980	Do.	Suspension polymerisation process for making vinyl resins for use in plastisol.
152264	21-1-1981	Do.	Emulsion polymerisation process with saw emulsifier concentration.
152347	21-3-1980	Do.	Improved process for recovery of vinyl chloride monomers from vent gas stream in polyvinyl chloride plant.
152463	15-5-1981	Do.	Process for preparing spherical and porous vinyl resin particles.
152829	27-5-1981	Do.	A process for producing postchlorinated polymers having increased thermal stability.
153485	13-2-1981	Do.	Process for recovering vinyl polymers from emulsion polymerization lattics.
154795	13-8-1981	Do.	Process for producing chlorinated pvc resin.
155496	16-7-1982	Do.	A process for making internally coated reaction vassel for use in suspension polymerization of vinyl monomers.
155610	14-2-1982	Do.	A process for eliminating the build up of polymers on the internal surfaces of a polymerization vessel.
156236	22-3-1982	Do.	Improved process for the suspension polymerization of vinyl monomers.
156496	8-6-1982	Do.	A method and apparatus for obtaining extruded cellular polymeric resin product.
156604	6-9-1982	Do.	Apparatus and method for extruding cellular resin products.
156862	25-9-1982	Do.	Process for making vinyl dispersion copolymers through monomer metering.
156889	20-2-1982	Do.	A process for preparing chlorinated poly (vinyl chloride).
157077	25-9-1982	Do.	A process for making a foam product from chlorinated poly vinyl chloride.
162228	24-8-1984	BRITISH GAS CORP. of River mill House 152, Grosvenor Rd. London SWIV 3JV, England.	A process for the production of methane-containing gas.
163229	28-3-1985	CENTRAL DIERGENEES KUNDIG INSTITUTE of Edelhertweg 15, 8219 PH LELYSTAD, the Netherlands.	A process for preparing marek's disease virus done suitable for use in a vaccine.
162708	13-3-1985	CENTRALNYOSRODEX BADAWC of U1 Manywilska 42B, Wars 2awa, Poland.	Process of producing cellular concrete with industrial waste as aggregate.
162513	29-3-1984	CENTRO SVILUPPO MATERIALI of via DJ CASTEL ROMANO 00129 ROME ITALY.	A process for preparation of stable coal-water mixtures.

1	2	3	4
162879	10-12-1984	Chemte Linz AG. Now, Chemte Holding Akttengesellschaft St. Peter-Stra Be 25, A-4021, Linz.	Process for the preparation of glyoxals and alkylglyaxals.
160950	27-3-1984	Do.	Process for the preparation of an isocyanic acid/ammonia gas mixture having a low cyanuric acid content, and an apparatus for carrying out the process.
148118	22-3-1978	Ciba-Geigy AG. Klybeckstrasse 141, 4002 Basle, Switzerland.	Process for bleaching textiles.
155696	31-8-1981	Ciba Geigy Do Klybeckstros'e 141-4002 Basle, Switzerland	Process for bleaching textiles or removing stains from textiles.
157590	4-3-1982	Do.	An electrochemical process for the preparation of benzanthrone.
161674	28-11-1983	Do.	Process for the preparation of bromoanthraquinones.
154764	15-10-1980	CIL Inc. 630 Dorchester, Blvd, West Montreal, Quebec, Canada.	Apparatus for treating waste mixed liquor and method for treatment of activated sludge waste.
152657	30-6-1980	DR. C. OTTO & COMP.	A method of manufacture of coke.
155388	12-2-1981	Do.	A Process for preparing quenched coke from hot cake and for simultaneously producing water gas by using sensible heat of hot gas.
158981	15-2-1983	DR. C. OTTO & COMP. GmbH Christrasse 9, 4630 Bochum West Germany.	A method of obtaining an optimum yield of gas of optimal quality by gasification of high ash-content bituminous fuels in a gasifier.
154089	4-2-1981	CPC INTERNATIONAL INC. a Delaware Corporation located at International Plaza P.O. Box 8000, Englewood cliffs, New Jersey, 07632, U.S.A.	A method for the production of immetilized glucose isomerase.
152573	18-12-1980	Denki Kagaku Kogyo Kabushiki Kaisha 4-1, Yuraku-cho, 1-chome, chiyoda-ku, Tokyo, Japan.	Improvement in or relating to a method for production of carbon black.
152693	11-12-1979	E.I. Du Pont	A method of producing an explosive composition of water-in-oil emulsion type.
152973	28-5-1980	Flowcon or Painontie 25, 37630 Valkeakoski, 3, Finland.	A binder (cement) and process for producing the same.
147255	5-10-1977	FMC Corporation 2000 Market Street, Philadelphia, Pennsylvania 19103, USA.	A process for obtaining hydrogen sulfide free steam from geothermal steam or industrial gas steams containing hydrogen sulfide and water vapour.
164161	9-7-1985	Hans A Schaeffer of 14, Paliant Avenue New Jersey 07036, U.S.A.	A process for preparing a dental composition useful in combatting gum disease.
154098	17-1-1981	Harold J. Hainen, Gene E. Mc Clelland and E. Lindstrom 4990 Golden springs Drive, Reno Nevada 89509 USA, 49E Quail Street, Sparks, Nevada 89431 USA etc.	A process for percolation leaching of precious metals such as Gold and/or silver ores.
156492	21-3-1983	Hoogovens Groep B.V. P.O. Box 10.000, 1970 CA, Ijmuiden, the Netherlands.	Process for producing steel in a converter from pig iron and ferrous scrap.
152747	1-4-1981	Huhtamaki Oy of Pansiontie 45-47, SF-20210 Turku 21, Finland.	Copper wire having corrosion-resistant core for intrauterine birth control devices and a method for manufacturing the same.

1	2	3	4
157551	23-2-1982	Hylsa S.A.	Method and appratus for the reduction of metal ores.
159559	11-7-1983	Do.	Method of converting iron ore into molten iron.
153504	19-12-1979	ICI Ltd., Imperial Chemical House, Millbank, London SW1P, 4QG, England.	A process for the oxidation of a substituted aromatic compound.
156031	1-5-1981	ICI, Ltd.	A process for the production of olefins.
156032	5-5-1981	Imperial Chemical Industries Plc. Imperial Chemical House, Millbank London SW1P 3JF, England.	A process for the production of methanol.
156152	30-3-1981	ICI Limited Imperial Chemical House, Millbank, London SW1P 3JF, England	A process for the production of a multi-layer protective and/or decorative coating upon a substrate surface and a substrate so coated.
156777	11-6-1981	Do.	A process for producing a gas containing hydrogen.
160074	7-10-1983	IMI Titanium Ltd. P.O. Box 216, Witton, Birmingham 86 7BA, England.	Method of manufacturing a weldable alloy of titanium.
157911	9-3-1982	Imperial Chemical Industries Plc.	Process for reacting carbon monoxide with steam.
158868	1-10-1981	Do.	A process for the production of ammonia.
158970	19-5-1982	Do.	A process for the preparation of quinoline derivatives.
159188	5-4-1983	Do.	Process for the production of ammonia.
159347	6-6-1983	Do.	A Process for the manufacture of coloured intagliated article.
160045	11-8-1983	Do.	A process for polymerisation of ethylenically unsaturated monomers.
160075	31-10-1983	Do.	A process for coating a conductive substrate.
160577	30-3-1981	Do.	A basecoat composition.
146351	7-5-1976	Imperial Metal Inds (Kynoch) Ltd., Kynoch Works, Wiltown Birmingham 13 67 BA England.	A method of manufacturing an alloy of titanium.
154108	21-3-1981	I.S.C. Smelting Ltd. 6 St. James Square, London SW1Y 4LD, England.	Method of manufacturing zinc, with improved step of charging zinc smelting blast furnaces.
156789	4-3-1983	Do.	Roasting of mixed sulphide ores or concentrates
158383	13-6-1984	John Wyeth and Brother Limited Huntercombe Lane South, Taplow Maidenhead SL 6 OPH, U.K.	A process for the preparation of an edible fat composition.
150626	13-9-1978	Laszlo Paszner etc. 3906 West 33rd Avenue, Vancouver, British Columbia.	A method for the saccharification of Lignocellulase and the concomitant recovery of lignin therefrom.
144027	14-4-1977	The Lubrizol Corporation Box 17100 Euclid Station, Cleveland, Ohio 44117 USA.	A process for preparing a magnesium containing complex.
148713	27-7-1977	Do.	Method of making at atleast one nitrogen containing organic compound from a substituted nitrophenol and a hydrazine compound.
149315	1-9-1978	Do.	Process for preparing a sulfurized composition.
149615	4-9-1978	Do.	Process for preparing sulfurized composition.

1	2	3	4
150090	8-3-1979	The Lubrixol Corporation 29400 Lakeland Blvd, Wickliffe, Ohio 44092, U.S.A.	Process for preparing an additive Composition.
152377	5-5-1980	Do.	A method for preparing phosphorus acid metal salt composition.
152910	11-4-1980	Do.	Process for preparing mixed metal salts useful as additive for lubricants or functional fluids.
152732	16-4-1980	Do.	An improved phosphorus-containing lubricating compositions.
152939	18-9-1979	Do.	Process for the preparation of a nitrogen containing phosphorus-free carboxylic acid derivative.
153881	25-10-1979	Do.	Process for the preparation of carboxylic solubilizer/surfactant composition.
154056	14-11-1980	Do.	A process for preparing a lubricant additive comprising metal/metal compound metalloid complexes.
155231	5-9-1981	Do.	Improved crude oil composition.
155285	5-9-1981	Do.	Mixed alkylesters of interpolymers for use in crude oils.
156659	24-5-1983	Do.	A composition for use in oil based lubricants containing carboxylic acid derivatives of alkanol tertiary monoamines.
157101	11-4-1980	Do.	Phosphorus and sulfur containing lubricating composition and functional fluid compositions of improved thermal stability.
157683	16-4-1980	Do.	A process for preparing phosphorous containing lubricant additive.
157985	25-9-1979	Do.	An aqueous system comprising water and carboxylic solubilizer/surfactant composition.
158265	5-4-1984	Do.	A process for preparing novel boron-containing compositions.
158598	8-9-1982	Do.	A process for preparing a composition for lubricating metal during working thereof.
161461	8-8-1983	Do.	A liquid composition having hydrocarbyl substituted carboxylic acylating agent derivative containing combinations.
161606	16-2-1984	Do.	An additive composition having alkyl phenol and amino phenol for use in lubricating compositions.
152255	14-8-1979	Midrex International B.V. Wilfriedstrasse, 12, 8032 Zurich, Switzerland.	Method for the direct reduction of iron using gas from coal.
155080	14-8-1981	Do.	Method and apparatus for the direct reduction of iron in a shaft furnace using gas from coal.
160813	1-6-1983	Do.	Method of generating a reducing gas.
155904	31-3-1977	Mitsubishi Rayon Co. Ltd. of 8 Kyoboshi 2-chome, Chuo-ku, Tokyo, Japan.	Fuel pollets and method for making them from organic fibrous materials.
154210	21-5-1981	Mitsui Toatsu Chemicals Inc. 2-5, 3-chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan	Improvement in a process for the preparation of a catalyst system for polymerization of α—olefines.

1	2	3	4
156483	17-2-1983	Mitsui Toatsu Chemicals Inc. 2-5, 3-chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan.	Process for preparing of 3, 3'-diamino diphenylsulfones.
156854	5-3-1982	Do.	An improved process for producing propylenecthylene block copolymer or propylene polymers.
151948	18-6-1980	Mitzui Petrochemical Industries Ltd. 2-5,-3-chone Kasumgaseki-Chiyoda-ku, Tokyo, Japan.	Process for producing olefin polymers or copolymers.
150497	8-11-1978	Monsanto Co. 800 North Lindbergh, Boulevard, St. Louis Missouri-63177 USA.	A process for preparing thermoplastic compositions.
150612	23-10-1978	Do.	The process for making nitro-diarylamines.
150736	1-11-1978	Do.	A process for the preparation of nitrodiarylamine.
150804	4-1-1979	Do.	Process for making an amide of formic acid.
151581	6-3-1979	Do.	Process for separating gas from gaseous feed mixture.
153458	6-3-1979	Do.	Process for synthesizing ammonia from hydrogen and nitrogen.
155268	4-1-1979	Do.	Process for Preparing nitrodiaryl-amine.
155993	8-6-1982	Do.	Improvements in a process for the production of cyclohexylamine.
156432	12-3-1982	Do.	Process for catalytically hydrocracking a hydrocarbonaceous feed.
156863	18-10-1982	Do.	A process for inhibiting premature vulcanization of a velcanizable rubber composition.
157351	11-3-1982	Do.	A process for catalytically hydrocracking a hydrocarbonaceous feed.
159074	10-8-1983	Do.	An improved vulcanizable rubber composition.
159092	22-8-1983	Do.	Process for the preparation of thermoplastic elastomers.
159531	17-1-1983	Do.	Process for producing paraphenylenediamine mixture.
152086	12-5-1981	Nippon Zeon' Co. Ltd. of 6-1, 2-chome, Marunouchi, Chiyoda-ku, Tokyo, Japan.	Improved process for separating conjugated diolefin hydrocarbons from a hydrocarbon mixture.
153409	5-12-1980	Do.	Method for inhibiting polymerization of conjugated dienes in a process for separating conjugated dienes from a hydrocarbons mixture.
155678	9-12-1980	Do.	Process for extracting distillation.
157555	7-10-1982	Do.	A process for producing a reactor for preparing vinyl chloride polymer.

1	2	3	4
152485	8-5-1979	Nissan Chemical Industries Limited 7-1-3, Kanda Nishiki-cho, Chiyoda-ku, Tokyo, Japan.	Improved process for polymerizing ethylene.
157330	21-8-1982	Do.	Process for producing polyethylene.
158042	4-6-1982	Do.	A process of preparation of a catalyst for the polymerization or copolymerization of ethylene.
158588	29-3-1985	Do.	An improved process of polymerization or copolymerization of ethylene.
145617	22-8-1977	Outokumpu OY Toolonkatu 4, SF-00100 Helsinki, Finland	Hydrometallurgical process for the recovery of zinc, copper and cadmium from their ferrites.
147866	26-9-1977	Do.	A hydrometallurgical process for the recovery of valuable metal content from the soluble silicate-bearing materials.
150879	22-11-1978	Do.	A process for the separation of phosphate and carbonate minerals from each other by froth-floating.
154127	22-11-1978	Do.	An improved process for recovering separately phosphate and carbonate minerals from phosphate-carbonate silicate ores or concentrates.
155869	25-9-1981	Do.	A process for the recovery of lead, silver and gold from the iron-bearing residue of an electrolytic zinc process.
157144	1-7-1983	Do.	Procedure for roasting seleniferous material.
149751	10-2-1978	Phillips Petroleum Co. Bartlesville, State of Oklahoma, USA.	A process for preparinga passivating agent and the catalytic process using said passivating agent in presence of a cracking catalyst.
156603	28-7-1982	R.J. Reynolds Tobacco Company Main & Fourth Streets, Winston-Salem State of North Carolina, 27101, U.S.A.	Improved smoking tobacco product and process for improving the flavour or aroma of such product.
154133	30-8-1980	Rutgerswerke AG. Mainser Landstrasse 217, D-6000 Frankfurt/Main 1, Germany.	Process for the preparation of highly aromatic pitch like hydrocarbons.
152053	21-2-1979	Santhanu Roy 13, Nanda Kumar, Choudhury Lane, Calcutta-700006, India.	A process for maufacturing a polymeric foam.
156896	7-6-1982	Do.	A process for the manufacture of bitumen polymeric elastomers.
161852	10-12-1984	Do.	An improved ignitable composition of matter and process for preparing the same.
151254	21-12-1978	Sasol One (Proprietary) Ltd. Klaisie Havenga Road, Sasolburg, Orange free State, Republic of South Africa.	Process for coal liquefaction.
154169	13-8-1981	Scott Bader Co. Ltd. Wilmcston, Wellingborough, Northamptonshire NN9 7RL, England.	Anti-fouling coating compositions.
154530	1-4-1981	Shell Internationalae Research Maatschappij B.V.	A process for the synthesis of middle distillates of petroleum.
155483	14-10-1983	Do.	A process for preparation of oxygen-containing organic compounds and paraffinic hydrocarbons.

1	2	3	4
155501	3-11-1981	Shell International Research Maatschappij B.V.	Removal of hydrogen sulphide and carbonyl sulfide from gaseous mixtures.
155631	24-5-1982	Do.	Process for the removal of H_2S from a sour gaseous stream.
156108	3-5-1982	Do.	Process for the removal of H_2S and CO_2 from gaseous streams optionally comprising hydrocarbons.
156182	2-1-1982	Do.	A process and apparatus for the preparation of cooled and purified gas from a hot gas..
156408	14-6-1982	Do.	Process for the removal of CO_2 and if present H_2S from a gas mixture.
156826	11-5-1982	Do.	Process for the removal of CO_2, H_2S and COS from gaseous streams.
156920	24-5-1982	Do.	Sulphur recovery process.
157514	14-6-1982	Do.	Process for the removal of H_2S and CO_2 from a gas mixture.
158141	9-2-1983	Do.	A process for the separation of a liquid mixture by extraction.
158380	5-11-1983	Do.	Process for the preparation of a fisheertropsch catalyst and use of this catalyst in the preparation of hydrocarbons.
158700	19-7-1983	Do.	Process for the preparation of hydrocarbons.
147427	21-1-1978	Shin-Etsu Chemical Co. Ltd. 6-1 Otemachi 2-chome, Chiyoda-ku, Tokyo Japan.	Improved method for the polymerization of vinyl monomers.
151895	14-10-1980	Do.	Method for the preparation of vinyl chloride resins by suspension polymerisation.
153574	24-7-1980	Do.	Improvement in the polymerization process of vinyl chloride.
157650	23-3-1982	Do.	Improvement in or relating to polymerization of an ethylenically unsaturated polymerizable monomer.
157818	15-10-1982	Do.	Improvements in or relating to a polymerization reactor used for carrying out polymerization of a vinylic monomer.
159723	4-10-1983	SKW Trostberg AG Dr. Albert-Frank-Strasse, 32, D-8223 Trostberg, Federal Republic of Germany.	Nitrogen fertilizer with a content nitrification inhibitor.
152254	10-8-1979	Stamicarbon B.V. P.O. Box 10, Geleen, The Netherlands.	Method for the direct reduction of iron using gas from coal.
152912	9-5-1980	Do.	Process for treating urea containing waste water for recovering NH_3 and CO_2 therefrom and utilising said process for preparing melamine.
154019	26-4-1980	Stamicarbon B.V. P.O. Box-10, 6160 MC, Geleen, The Netherlands	Thermosetting powder based on a unsaturated polyester resin & process for preparing the same.
154475	22-7-1981	Do.	Process for the preparation of copolymers of ethylene with atleast one other 1-alkene.
154476	22-7-1981	Do.	Process for the preparation of copolymers of ethylene with at least one other 1-alkene.

1	2	3	4
154655	26-3-1981	Stamicarbon B.V. P.O. Box-10, 6160 MC, Geleen, The Netherlands	Production of polyamide based objects and objects so produced.
154656	26-3-1981	Do.	Preparation of polytetramethylene adipamide.
154657	26-3-1981	Do.	Preparation of high molecular polytetramethylene adipamide.
154820	7-5-1981	Do.	Process for the preparation of a supported chromium oxide type catalyst for the polymerization of olefins.
156790	23-4-1983	Do.	Process for preparing cyclohexanol and cyclohexanone.
158001	28-6-1982	Do.	Process and device for the preparation of polymer melts which are substantially free of volatile components.
158211	3-3-1983	Do.	An improved process for preparing melamine.
158343	16-10-1982	Do.	Process for the production of polymer filaments having high tensile strength and modulus.
151070	30-3-1979	Union Carbide Corpn.	Preparation of ethylene copolymers in fluid bed reactor.
152087	30-3-1979	Do.	A process for preparing a catalyst composition for homopolymerizing ethylene and the catalyst composition prepared by the same.
152088	30-3-1979	Do.	Impregnated polymerization catalyst process for preparing the same and its use for ethylene copolymerization.
152141	30-3-1979	Do.	Preparation of high density ethylene polymers in fluid bed reactor.
152145	27-12-1979	Do.	A process for producing a magnesium an titanium containing catalyst composition.
152153	30-3-1979	Do.	Process for the preparation of high density ethylene polymers in fluid bed reactor.
152450	17-11-1979	Do.	A catalytic process for producing ethylene copolymer.
153888	17-6-1980	Do.	A process for making heterogeneous ethylene based polymers having a high tear strength.
154420	29-6-1981	Do.	An improved silica supported catalyst composition and process for preparing the same.
155121	27-12-1979	Do.	A catalytic fluid bed process for producing ethylene polymers.
155691	30-3-1979	Do.	A catalytic process for producing ethylene homopolymer.
156046	29-6-1981	Do.	An improved process for producing thylene copolymer with a Ti containing catalyst.
158341	10-9-1982	Do.	Process for producing an improved particulate resole resin.
159207	27-12-1982	Do.	Process for producing particulate novolac resins and aqueous dispersions.
156500	2-11-1981	Wacker-Chemie GmbH Prinzregentenstr. 22, 8000 Munchen 22, West Germany.	Process for the manufacture of pure storage stable acetoacetamide.

MECH; AND GEN LIST NO.I

COMMERCIAL WORKING OF PATENTED INVENTIONS

The following Patents in the field of Mechanical & General Engineering Industry are not being commercially worked in India as admitted by Patentees in the statements fild by them under section 146 (2) of the Patents Act, 1970 in respect of calander year 1990 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the prupose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	2	3	4
158648	23-5-1983	A. Ahlstrom OY, SF. 29600 Noormarkku, Finland.	An apparatus for recovering heat from gas containing molten components.
162813	20-4-1985	Adolf Berkman, Bismarck Strasse 80, 7251, Weissach, Germany.	An apparatus for drying coated articles in particular powder coated articles.
162969	3-10-1985	AE BISHOP, 19, Buffalo Road, Gladesille, New South Wales, Commenwealth of, Australia.	A Die Head for a Roll imprinting machines.
148540	20-1-1978	Aktiebolaget Medline Wallingstan 37, 5-11124 Stockholm, Sweden.	Device for atfeast temporary occulsion of body channels.
150980	28-11-1978	Albe S.A. 6982, Agno, Switzerland.	A device for edging the point of ball pens in particular those made of had material.
161130	30-1-1984	Alejandro Stein, Residencias Sierra Nevada, Calle ohula Vista, Chula Vista, Las Mercedes, Caracas, Venezuela.	An end connector for connecting two or more hollow tubular structural numbers.
164697	05-5-1986	Alfa-Laval Food & Diary Engineering AB, 22103, Lund 1, Sweden.	Closable bag & method and arrangement for aseptic filling thereof.
147938	24-9-1977	American Standard Inc.	An absorbing apparatus in a draft-gear for railroad cars.
150945	13-10-1978	American Standard Inc.	Housing for draft gear.
154794	4-8-1981	AMERICAN STANDARD INC. State of Delaware 40 West 40th Street, New York, 10018, U.S.A.	Lacking device for reducing a draft gear to a compressed state prior to installing or removing a draft gear from railway cars.
154663	29-6-1984	Amitava Ghosh Dastidar, 61, B, Shakespeare Sarani, Calcutta-700017, W. Bengal, India.	Reinforced concrete piles.
154685	15-2-1982	Do.	Reinforced concrete piles.
159849	10-8-1984	Amitava Ghosh Dastidar, 5 Hungerford Court 12/1, Hungerford Street, Calcutta-17, West Bengal, India.	Reinforced concrete piles.
159386	25-1-1984	ARAP. Applications Rationnelles de la Physique, 70 Rue, Yvan Trourgue, Neff 78380, Bougival, france.	A wheel for a centrifugal compressor and a method of making such a wheel.
157839	17-12-1982	Arthur Ernest Bhishop, 17, Burton Street, Mosman, New South Wales, Australia.	Rack and pinion steering gear.
158109	4-6-1983	Do.	Method and apparatus for making steering rack bars.
164302	7-8-1985	Arthur Ernest Bishop, 17 Burton Street Mosman, New South Wales, Australia.	Hydraulic control valve for a power assisted steering system for a vehicle.
164346	19-3-1986	ARTHUR ERNESTBISHOP YKL, 19 BUFFALO RD. GLADESVILLE, NEW SOUTH WALES, COMMON, WELTHOP, AUSTRALIA.	Core for a rotary valve for a power steering system.

1	2	3	4
165049	3-10-1987	Arthur Ernest Bishop 19 Buffald Road, Bladesville, New South Wales, Australia.	Apparatus for imprinting of edges of grooves in valve cores for rotory valves for use in power steering gear.
159133	22-7-1983	Atlantis Energie AG, Thunstrasse 8, 3000, Bern 6, (Canton of Berne) Switzerland.	Apparatus for automatically directing solar radiation focused by areflcotor and a solar power plant comprising such apparatus.
162760	15-1-1985	Axel Johnson Engineering, of Hamngatan, 60, S-14900, Nynashamn, Sweden.	A plate pack for a lamella separator.
154250	6-3-1981	Beheermaatschappij, H.D. Groeneveld B.V. No. 542, Ringdijk, 2987 Vz, Bolnes, The Netherlands.	A fire-proof wall.
163048	25-3-1985	Barnard Zimmern of Vantage Point condominium 6, New Street, East Norwalk, CT, 06855, U.S.A.	A positive displacement screw machine.
152261	8-1-1980	BPB INDUSTRIES LTD, of Ferguson House, 15 Marylebone Road, London NW1, England.	A method and apparatus for heat-treating particulate material.
152423	23-5-1979	British Railways Board, Euston House 24, Evershot St. P.O. Box 100, London, NW 1, D2, England.	Apparatus for relevelling railway track.
155423	7-7-1981	Brown & Williamson, Tobacco Corporation, 1600 West Hill Street, Louisville, kentucky 40232, U.S.A.	Apparatus for making grooves in tobacco smoke filters.
155856	3-2-1983	Brown & Williamson, Tobacco Corporation	Cigarette filter.
156401	23-2-1982	Do.	Cigarette filter.
157633	2-2-1983	Brown & Williamson Tobacco Corporation, 1600 West Hill Street, Louisville, kentucky 40232, USA.	Improvements relating to tabacco smoke filters.
155182	22-12-1980	Carrier Corporation Carrier Tower, P.O. Box 4800, Syracuse, New York, 13221, USA.	Shaft seal and fluid flow control device for use with a rotary machine.
154140	9-1-1980	Cavalletto S.R.L. of Via Bonaldo Stringhor 27, 00198, Rowe, Italy.	Apparatus for unloading dry loads from ship.
159742	18-8-1983	The chavles strak Draper Laboratory Inc. of 555, Technology Square, Cambridge, Massachusette, 02139, U.S.A.	System for controlling the position of a strip of material with respect to a linerar movable Seam joining device.
150509	23-6-1978	Chem Rex Inc.	Method and apparatus for coating the inner surface of a pipe.
156557	20-5-1982	Clayton Dewandre Co. Ltd., P.O. Box 9 Titanic Works, Lincolm, LNS 7 JL, U.K.	An improved reciprocating exhaustor driven by diesel engine.
159691	24-11-1983	Conti Romano, 37 Via. Pier. Delia, Francesca, Prate, Italy.	A Postal module.
146882	22-12-1975	Contraves A.G. Schaffausersstrasse 580, 8052, Zurich, Switzerland.	An assembly which can be used as a ramp.
160893	7-5-1984	Contraves AG. Schaffausersstrasse, 580, 8052, Zurich, Switzerland.	An optical system for a periscope-like sighting device for locating, tracking and ranging a target.
160894	7-5-1984	Contraves AG.	Periscope-like sighting device.
152101	14-12-1979	C.P.C. International Inc. International Plaza, Englewood, Cliffs New Jersey, 07632, USA.	Apparatus for fluidized bed drying of starch.
148622	20-4-1978	Dr. C. Otto Comp.	A method for taking in and taking away gases leaking during coking and a device therefor.
152170	30-5-1981	Dr. C. Otto & Comp. of Christstrasse, 9, 4630, Bochum, West Germany.	Closing and opening device for use in coke ovens.

1	2	3	4
152515	7-12-1979	Dr. C. Otto & Comp. GmbH. of Christestrasse, 9,4630, Bochum, West Germany.	Vertical chamber for the continuous dry quenching of coke.
152680	2-6-1980	Dr. C. Otto & Comp. GmbH.	A method of renewing the brickwork of coke ovens.
152766	31-10-1980	Dr. C. Otto & Comp.	Coke var for coke ovens.
153268	2-6-1980	Dr. C. Otto & Comp. GmbH.	A coke oven battery.
153277	4-12-1980	Dr. C. Otto & Comp.	Door extractor for the closures of horizontal coke ovens.
153338	2-5-1980	Dr. C. Otto & Comp. GmbH.	Extraction of gases evolved in the charging of coke ovens.
153339	24-11-1980	Dr. C. Otto & Comp.	Coke oven battery adapted to be regeneratively heated by lean gas or rich gas at choice.
153570	25-2-1980	Dr. C. Otto & Comp. GmbH.	Nozzle provided with several outlet apertures for coke ovens.
155623	12-2-1981	Dr. C. Otto & Comp. GmbH.	Apparatus for dry cooling of hot raw cole.
156936	24-12-1982	Dr. C. Otto & Comp.	Heating system for the regenerative heating of a coke oven battery having twin heating flues.
158200	31-12-1983	Dr. C. Otto & Comp. GmbH. Postfach 101850, D. 4630, Bochum 1, West Germany.	Coke oven door.
158919	19-12-1983	Dr. C. Otto & Comp. GmbH. Postfach 101850, D-4630 Bochum 1, West Germany.	Device for levelling the coal charged into the coking chamber of a coke oven.
152345	17-3-1980	CPC International Inc. International Plaza, Englewood Cliffs, New Jersey 07632, USA.	Improvement in Fluidized bed apparatus.
159737	15-7-1983	Dalichi Engineering Co. of 917, Koda-CHO, Kawashima-Cho, Hashima-Gun, Gifu-Ken, 483, JAPAN.	Squeeze pump.
149659	21-3-1978	Dainichi-Nippon Cables Ltd., No. 8, Nishinocho, Higashimukaijima, Amagasaki-shi, Hygo, Japan.	A curing apparatus for the production of shaped articles of cross-linked polymeric material.
153610	18-12-1980	Denki Kagaku Kogyo Kabushiki Kaisha, 4-1, Yuraku-cho, 1-Chome, Chiyoda-ku, Tokyo, Japan.	Improved process for the production of carbon black.
155608	1-10-1981	Dresser U.K. Ltd., 197 Knightsbridge, London SW7, 1RJ, England.	A method and apparatus for treating a polluted gas with a liquid.
148753	19-8-1977	Dunlop Limited, Dunlop House, Ryder Street, St. James's London, SW1, England.	Improvements in or relating to springs.
159436	14-9-1983	Eiglenir Inc. 1150 Mauch chunk Road, Bethlehem, Pennsylvania, 18018. USA.	Burner register assembly.
150295	30-11-1979	Eastern Carbons. Sneh Milan. Telephone Exchange Road, Dhanbad-826001, Bihar, India.	Improved beehive coke oven.
150303	30-11-1979	Do.	A battery of improevd beehive coke ovens.
150489	21-1-1980	Do.	Self generated continuous carbonising furnace.
158494	7-4-1982	Do.	Equipment for continuous devolatilisation of coal.
158165	19-2-1983	E Fonseca, of 11, Hungerford Street, Caclutta-700017, India.	Assembly of sections, panels or any other prefabricated items and that the said esmend, ponsications.

1	2	3	4
148137	15-4-1976	Electronique Marcel Dassault. 55 Quai Carnot, 922/4, Saint, Cloud, France.	Apparatus for guiding a rotating moving body
158451	22-4-1983	Energy convesion Devices Inc.	A method of making multi component compositionally disordered material for reversibly, storing hydrogen.
157721	20-6-1983	Etablissements Moral, Faviers-28170, Chateauneufen, Thymerais, France.	A sleeve for protecting cable splices.
163710	15-5-1986	Etablissements morel Al.	A protecting sleeve & a method for protecting cable splices.
144646	18-9-1976	Festo-Machinenfabrik Gottlieb stroll, Ulmer Strasse, 48, Esslingen a N., F.R.G.	Connecting apparatus for use in fluid supply lines.
149138	30-12-1977	Festo-Maschinenfabrik Ulmer Strasse 48, Esslingen, West Germany.	Fluid transfer apparatus.
151441	19-9-1979	Festo-Maschinenfabrik.	Connecting piece for supply lines carrying gaseous or fluid media.
153195	17-9-1979	Festo-Maschinenfabrik.	Rotary slide valve.
158296	23-4-1982	Festo-Maschinen fabrik Gottliebstoll. Ulmer Strasse 48, 7300 Esalingen, F.R.G.	A spool valve.
162692	28-8-1984	Firma carl Still.	Process and apparatus for the production of briquetting material for hot briquetting.
156250	18-10-1982	Fisher controls, International Inc., 7711, Bonhome, clayton, Missouri 63105, U.S.A.	Pneumatic controller for controlling a process variable.
157430	14-10-1982	Fisher Controls International, Inc., 7711 Bonhome, clayton, Missouri 63105, USA.	Dynamic fluid pressure sensor for a vortex-shedding flowmeter.
162741	5-2-1984	Fujikura Ltd., of No. 5-1 Kiba, 1-chome, Koh-toh-ku, Tokyo, Japan.	Self bonding enameled wire and hermetic compressor motor using the same.
151668	8-3-1979	Gebruder Adams, Armaturen N. Apparate GmbH. & Co. Kg. D-4630, Bochum, postfach 1001 OS, West Germany.	Improved disc valve.
150083	11-7-1978	Hans Ulrich, Klingenberg, 3247 St. Niklans bei Merzligen, Canton of Berne, Switzerland.	Watchcase.
150716	24-1-1979	Harold Ashely, Mcmaster etc. 420, water Street, Woodville, Ohio, USA.	Apparatus for bending and tempering glass sheet.
156495	9-2-1982	Harold A. McMaster, 707, Riverside Drive, Woodville, Ohio, 43469, USA.	Glass sheet roller conveyor furnace including gas jet pump heating.
160208	16-4-1984	Heinz kaiser AG. Glattalstrasse 837, 8153, Rumlang, Switzerland.	Boring tool.
160461	8-5-1984	Heinz Kaiser AG.,	Tool part in combination with a connecting shaft of a machine tool.
157316	23-10-1982	Hendrikus Van Berk, H. Govertkade 3, 2628EA, Delft. the Netherlands.	Apparatus for suctioning sub-merged bottom material.
159096	3-10-1983	Henry C. Lasater P.O. BOX 616, cuba, New Mexico, 87013, USA.	Liquid degasification device.
160856	9-3-1984	Hoerbiger Ventitwerke Akt of 23, Braunhubergasse, A-1110, Vienna, Austria.	Improvement in a lifting device for the value plates of compressor valves.
160537	30-11-1983	HOESCH AG.	Rail track whose width is adjustable by a predetermined guage.

1	2	3	4
161990	7-11-1985	HOESCH AG.	Under floor wheel set barring machine for retreading of rim circumferences of railroad wheelsets.
162376	2-4-1985	Do.	Centre free large rolling bearing.
163768	20-3-1986	Hoesch Maschinen Fabrik Deutschland.	Under floor wheel set turning machine for reprofiling wheel tyre contours of railway wheel sets.
158979	15-1-1983	Honda Giken Kogyo, Kabushiki Kaisha, No.27-8, 6-chom, Jingumae, shibuya-ku, Tokyo, Japan.	Gang head for a replaceable gang head machine tool.
162997	8-4-1985	Hughes Aircraft Co., Centincla & Teale Street, Culver City, State of California	Thermally actuated safety device for a pressure vessel or presserized gas generator, such as a rovet motor case.
161497	7-7-1984	Do.	A two axis optical intertial reference apparatus for providing a stabilised optical reference.
162443	23-1-1985	Do.	Optical coupling system for the transmission of Radiant energy to or from an optical wave guide over a spherical angle greater than a hemisphere.
162953	3-1-1984	Do.	Apparatus for enhancing image resolutions.
156234	13-11-1981	Hylsa S.A. of Apdo. Postal 996, Monterrey, N.L. Mexico.	A rotary valve adapted to be used in regulating the gravity flow of a granular material.
157762	29-3-1982	Do.	Improved apparatus for breaking up agglomerated particulate matter.
156067	10-9-1979	I.C.I. Plc. Imperial Chemical House, Millbank London SWIP, 3JF, England.	Containers for liquid to be electrostatically sprayed.
158557	3-11-1982	Imperial chemical industries Plc.	Reactor for use in a catalytic reaction.
158995	13-12-1982	Do.	Process for the selective separation of atleast one phase of fluid fossil fuel compassed of a plurality of phases of different densities.
159549	28-1-1983	Imperial chemical Industries plc. Imperial chemical House, Millbank, London, SWIP, 3JF, England.	Apparatus for the characterisation of a surface coating film.
152965	16-3-1979	Instytut obrobki Plastycznejul, Zamenhofa 2/4, Poznan, Poland,	Method and apparatus for forging crank throws.
154651	31-5-1980	Instyut obrobki plastycznej, Ul. Zamenhofa 2/4, Poznam, Poland.	Forging device.
162108	1-12-1983	J. & D. Oram Ltd., 243 Heath Road, Leighton, Buzzard, Bed fordshire, England.	Lamp unit for providing a patch of substantially shadow free illumination.
161404	6-2-1985	J.J. Bollmann,	Base support for pole.
160111	31-8-1983	John stephen Nitsehke, 650 W. Front Street, Perrysburg, Ohio 43551, USA.	A positioning controller for conveyor in a glass sheet processing equipment.
160720	31-12-1984	Kabushiki Kaisha Itoh Seitetsusho, 14-10, Hirai, 5-chome, Edogana-ku, Tokyo, Japan.	Apparatus for soaking steel pieces.
152342	21-1-1980	Koninklijke Emballage Industrie Van Leer B. V. Amsterdamseweg, 206, Amstelveen, The Netherlands.	A method and tool for producing a bushing structure having a polygonal flange.
158983	17-2-1983	Korting Hannover AG, Badensedter Str. 56, 3000, Hannover 91, West Germany.	Burner for pulverized, gaseous and/or liquid fuels.
151987	25-9-1981	KRW Energy System Inc. Three Greenway plaza, Houston, Texas. USA.	Fluidized bed gasification reactor and method of producing therein a combustible gas from a particulate carbonaceous material.

1	2	3	4
152370	17-1-1981	KRW Energy Systems, Inc., Three Greenway Plaza, Houston, Texas 77046, USA.	A ffuidized bed combustion apparatus.
156313	26-11-1982	Do.	A ffuidized bed apparatus.
152349	22-5-1980	Lothar Teske, Hegelstr. 15, 5000, Koln 90, West Germany.	Arm-type feeder wheel for unloading solids from a storage bin.
152908	25-2-1980	Do.	A bunker clearance vehicle.
154840	26-4-1982	Lothar Teske, Hegelstr. 15, 5000, Koln 90, West Germany.	Device for discharging a round loose material sile.
156252	27-8-1982	Do.	Ash removal device for coal firing systems of steam generators.
157356	26-4-1982	Do.	Discharging device for a loose material bunker.
154449	26-11-1981	Maplan Maschinen-Und TECH. etc., A-1010, Wien, Schellinggasse 1, Austria.	Double-worm extrusion press.
150141	20-8-1978	Metallurgical & Engineering consultants, Ranchi-834002, Bihar.	Twin isolating and reversing cocks for the control of the underfiling gas flow rate to the treating system of a coke over battery.
161917	7-2-1986	Metallurgical & Engineering Consultants (India) Ltd., Ranchi-834,002, Bihar, India.	Blast furnace cast house runner system.
158502	6-12-1982	Mitsubishi Jukogyo Kabushiki Kaisha, 5-1, Marunouchi, 2-chome, choyoda-ku, Tokyo, Japan.	Calcining apparatus for powdery materials.
146320	30-5-1977	Mohil Tyco Solar Energy Corporation, 16, Hickory Drive, Waltham, Massachusetts, USA.	Method and apparatus for reducing residual stresses in crystals while the crystals are being pulled from a melt.
147431	30-4-1977	Mobil Tyco Solar Energy Corporation, 16. Hickory Drive, Waltham, Massachu-Setts, USA.	Apparatus for crystal growth.
157158	15-1-1982	Molins Plc. 2 Evelyn Street, London SE8, 5DH. England.	Feeding particulate material especially bobacce.
147738	14-11-1977	Monsanto Co. 800 North Lindbergh, Boulevard, St. Louis, Missouri 63177, USA.	Multi-component membranes comprising a porous separation membrane for gas separation and processes for gas separation using the multicomponent membranes
55415	14-7-1981	Nederlandse Centrale Organisatie Voor Toegepast. Natuurwetenschappelijk Onderzoek, Juliana Van Stolberglaan 148, The Hague, Netherlands.	An apparatus for controlling the air fuel ratio in a fuel supply system for combustion engines
161555	12-8-1983	Nederlandse Centrale Organisatie Voor Toegepast Natuurweten Schappelijk, Onderzoek, Juliana Van Stolbeglaan 148, 2595 CL, The Hague, The Netherlands.	Apparatus for the use of gas as secondary diesel engines.
154609	24-11-1980	Neotronics Limited, parsonage Road, Takeley, Bishops strotford, Hertfordshire, England.	Apparatus for measuring the degree of efficiency of combustion appliances.
154126	19-12-1981	Nitto Boseki Co. Ltd., No. 1, Aza, Higashi, Genome, Fuku-Shimiashi Fukushima, Japan.	Glass fiber forming unit.
163942	18-1-1985	NYBY Uddeholm Powder AB. 5-64 400 Torshalla, Sweden.	A method of and apparatus for making metal powder.
149743	4-5-1978	Okuli of 37800, Toijala, Finland.	Cardboard strip made up of consecutive package blanks.
150589	25-8-1978	Outokumpu oy Outokumpu, Finland.	A Process for producing pellets of pre-determined size from a finely divided material and an apparatus for carrying out the process.

1	2	3	4
149198	10-10-1977	Palitex Project-co. GmbH.	Two-for-one twisting machine.
151203	18-1-1979	Do.	Apparatus for use with a two-for-one twisting spindle for the taking up of and tension free release of a single pre-determined length of thread or the like.
151736	10-7-1979	Do.	Two for one twisting spindle.
152211	11-4-1980	Do.	A thread brake.
152223	23-7-1979	Do.	A thread take-up assembly.
152267	27-7-1979	Do.	Device for the de-activation and re-activation of textile apparatus more especially a two-for-one spinning spindle.
153910	2-8-1980	Do.	Thread storage for a two-for-one twisting spindle or spinning spindle.
154484	10-12-1981	Do.	Carrier device for at least two twister or bobbin tubes.
154584	16-4-1981	Do.	Thread brake.
155371	13-5-1982	Do.	Two-for-one twisting spindle.
155877	31-5-1982	Do.	Apparatus for use in the withdrawal of yarn from a yarn package.
156470	30-7-1982	Palitex Project-company GmbH. Weeserweg 8, 4150, Krefeld, West Germany.	A thread guide for drawing threads overhead from two yarn bobbins disposed coaxially one above the other.
156693	20-1-1982	Do.	Pneumatically threadable yarn brake and a two-for-one twisting spindle equipped therewith.
157197	20-8-1982	Philip Morris Inc. 100 Park Avenue, New York, New York 10017, USA.	Process for the production of tobacco lamina-filler with improved stiffness and increased filling power and a tobacco lamina filler produced thereby.
155280	28-11-1981	PLM AB, Djaknegatan 16, P.O. BOX 836, 7-201 86, Malmo, Sweden.	A method and device for producing a tubular object.
155404	28-11-1981	PLM AB. Djakengatan 16, P.O. Box 832, 5-201 86, Malmo, Sweden.	Bottle-like or jar-like container of thermo plastic material and a method and device for moulding it.
157956	26-11-1982	PLM AB Djaknegatan 16, 5-201 80, Malmo, Sweden.	Method of manufcturing a container of thermoplastic material.
161256	26-5-1984	Rimrock corporation 1700 Rimrock Road, columbus, USA.	Automatic lading opparatus.
161346	28-5-1984	Do.	Control system for automatic ladling apparatus.
155189	16-2-1981	Robert Cassour, Rue Clemenceau, 61300, L'Aigle, France.	Apparatus for transferring animal reproduction elements especially animal embrayos and semen.
157775	28-7-1982	Roberto Perlini Carso Venezia 93, 37047, San Bonifacio Verona, Italy.	Device for straight travelling stabilization and change of attitude on pre-determined paths for vehicle axles.
157957	26-11-1982	Rosemount Inc. 12000 West 78th Street, Eden Prairie, Minnesota 55344, USA.	An apparatus for conveying fluid pressures for use with a differential pressure transducer.
155939	17-6-1981	Royal Ordnance Plc. Griffin House, 5th Strand, Landon WQ 2N, 5BB, England.	Track link for a tracked vehicles.

1	2	3	4
156151	27-12-1979	Royal Ordnance Plc.	Improvements in or relating to breech machanisms.
161407	21-3-1985	Roy William Buckland 35, Pennycroft, Pixton, way, Forestdale crydoncro 9LL, England.	Improvements in shuttlecocks.
149349	23-6-1979	Ryosuke Hosoi, 5-9-10, Kami Minami, Hiranoku, Osaka, Japan.	An Improved drill for high seed machining operations.
159430	7-12-1983	Santanu Roy 13, Nanda Kr. Ch. Lane, Calcutta-700006, West Bengal, India.	A novel apparatus for effective utilisation of a solar power.
161348	27-6-1984	Santanu Roy.	Improvements relating to a wind machine for generating power from wind.
154202	20-2-1981	Schubert & Salzer, Maschinenfabrik, Aktiengesallschaft, Friedrich-Ebert- Strasse 84 8070 Ingolstudt, West Germany.	Device for lifting a tubular member from a spindle of a textile machine.
154211	26-5-1981	Do.	Apparatus for effecting a thread join in a bound yarn.
155398	12-10-1981	Schubert & Salzer.	Pivotable spindle mounting particularly for an apparatus for spinning bound yarn.
155959	28-1-1982	Do.	Apparatus for feeding tubes to and removing packages from spinning machines and twisting machines.
156611	10-6-1982	Do.	A device for performing a method of placing tubes on pins of a conveyor belt for making textile yarn.
159150	23-2-1983	Do.	Method of producing a thread on an open-end spinning machine and an open-end spinning machine for carrying out the method.
159261	23-2-1983	Do.	Suction duct for textile machines.
160694	20-8-1983	Do .	Open end spinning rotor obtained by non-cutting shaping work and a method of producing it.
155372	26-3-1981	Sealed Power corporation 100, Terrace Plaza, Muskegon, Michigan, 49443, U.S.A.	Piston ring.
152816	22-11-1979	Shell Internationale.	Apparatus for injecting particulate polymer into a pipeline hydrocarbons.
155455	16-9-1981	Do.	Apparatus for separating liquid gas mixture.
157357	26-11-1982	Shell Internationale Research Maatschappij B.V. Carel Van Bylandtlaan, 30, The Hague, The Netherlands.	A vertical column for separating liquid from admixture with gas.
156957	13-9-1982	Shin-Etsu Chemical Co. Ltd., 6-1, otemachi, 2-chome, Chiyoda-ku, Tokyo, Japan.	A vertical type polymerization reactor.
143958	24-11-1976	Simon-hartley Ltd., Etruria Works, Stoke-on-trent, Staff-ordshire, England.	An aerator and an installation for the aerator of a liquid incorporating it.
159039	9-6-1983	Single Buoy Moorings Inc., 5, Route de Fribourg, P.O. Box, 124, CH-1723 Marley, Switzerland.	Mooring system for maintaining a buoyancy body in position in relation to an otherbody.
160693	9-6-1983	Do.	Device for maintaining a buoyant body in position in relation to another body.

1	2	3	4
153698	12-3-1981	Societe Anonyme Dite, Societe Nationale Industriolle, Aerospatiale 37, Boulevard De Montmorency, 75016, Paris, France.	Improved blade for helicopter rotor.
154952	10-8-1981	Do.	Blade section for rotating winds of an aireraft.
150709	14-5-1979	Societe Dlte; A.C.M.A.T. Ateliers De Constructions Mechaniques, De L Atlantique, of Le Point du Jour 44600 Saint Nazaire, France.	Air-transportable highly autonomous-crosscountry medical vehicle.
151075	14-5-1979	Do.	Transfer box for a motor vehicle.
151682	13-9-1979	Societe Dite A.C. MA. T. Le Point due Jour, 44600, Saint Nazaire, France.	Automobile vehicle having a chassis integral with a cab.
152021	14-5-1979	Do.	Highly autonomous cross-country workshop and servicing van.
157461	6-9-1982	Societe Francaise De Munitions, 11 Impasse Gaudelet 75011, Paris, France.	A cartridge for hand and shoulder weapons.
152729	8-2-1980	Stamicarbon B.V. P.O. Box 10, Geleen, The Netherlands.	Process for making polymer filaments of high tensile strength and modulus.
154059	30-3-1981	Stamicarbon B.V.	Device for the spraying of a liquid by means of a gas.
152194	22-1-1981	Subratakumar Ghosh 32, G.B. Mondal Road, P.O. Ichapur, Nawabagung, 24, parganas, West Bengal.	An amphibian vehicle.
151672	28-5-1979	Sulzer Brothers Ltd., CH-8401, Winterthur, Switzerland.	Means for coupling a hand drive to a rotatable shaft.
154542	2-2-1981	Sumitomo Electric Industries Ltd., No. 15, Kitahama, 5-ohome, Higashi-ku, Osaka-shi, Osaka, Japan.	Rubber and plastic covered cable cross linking device.
157386	14-10-1982	Sumitomo Electric Industries Ltd., No. 15, Kitahama, 5-chome, Higashi-ku, Osaka-shi, Osaka, Japan.	Process for producing heat resistant aluminium alloys wires for conducting electrolysis.
158384	5-7-1985	Mr. Tarva Gupta, C/o. Coal Inspection Services, P.O. Dhansur, Dist-Dhanbad, Bihar, India.	An improved tank for the recovery of fine coal ash and other minerals from a water slurry of same.
147587	11-5-1977	TESA S. A. Rue Bugnon 38, 1020 Renens, Switzerland.	Adjustable fork gauge.
149199	1-11-1977	Tex Innovation AB, P.O. Box 50065-42105 Vastra, Prolunda 5, Sweden.	Method of producing a conditioned fibrous materials with a reduced tendency to wrinkel vacuum packing and if desired vacuum packing the so obtained materials.
148113	28-10-1977	Tomoe Technical Research Company, 2-91-1, Honjyo-Naka, Higashi-Osaka-shi, Osaka, Japan.	Butterfly valve.
158148	21-12-1983	Ube Industries Limited, 12-32 Nishimotocho, 1-chome, Ube-shi, Yamaguchi, Japan.	Improved precalciner for cement raw meal.
159982	10-4-1984	Do.	Cyclone.
160930	16-3-1984	Do.	Furnace operated by combustion of pulverized coal.
160970	16-3-1984	Do.	A pulverized coal feeder.
148474	29-3-1977	Unelec. S.A. 38 Avenue cleber 75784, Paris, Cedex 16, France.	An interchangeable three phase tripping device for a three pole circuit breaker.
153218	8-4-1981	Unie van kunstmest-fabricken B.V. Box 45, 3500 Utrecht, the Netherlands.	Process for making urea prills.
157630	16-12-1981	Union carbide corpon., 270, Park Avenue, New York, 10017, State of New York, USA.	Method and apparatus for applying foam to open-weak substrates.

1	2	3	4
151737	3-81979	United Technologies 1, Financial Plaza, Hartford, Connecticut 06101, England.	A control system for a wind turbine having a wind driven rotor.
147610	14-6-1977	United Technologies Corporation, 1, Financial plaza, Hartford, Connecticut 06101, USA.	A gas turbine.
151958	22-10-1979	Do.	A withdrawal method of directional solidification of a casting of metal or alloy for producing a directionally solidified article and a directionally solidified article thus produced.
153214	2-3-1981	Do.	Wind turbine blade pitch control system.
153477	6-4-1981	Do.	Wind turbine including drive train.
154454	7-12-1979	Do.	Method for fabricating wind turbine blades.
154485	22-12-1981	Do.	Blade pitch angle control device for a wind turbine generator.
154615	14-10-1981	Do.	Improvements in or relating to a method of manufacturing a filament round article.
154875	11-5-1981	Do.	Wind turbine having a hub or rotor with a plurality of air-foil blades mounted thereon.
156497	20-7-1982	United Technologies, 1, Financial Plaza, Hart ford, Connecticut-06101, USA.	A method and apparatus for manufacturing articles such as for example article of air-foil cross-sectional shape by filament winding.
156973	19-10-1982	Do.	A method of forming a tapered filament wound article.
157173	3-9-1982	Do.	Method of manufacturing a metal work piece and finishing metal surfaces by surface treatment of work pieces.
158212	16-3-1983	Do.	A wind turbine system for generating electric power.
158707	5-11-1983	Do.	The blade pitch angle control system for a wind turbine generator.
158792	2-6-1983	Do.	Blade feathering system for wind turbines.
159485	23-3-1984	Do.	A method of manufacturing a gas turbine engine having an annular combustion liner.
159954	5-11-1983	Do.	A system for minimizing the effect of yaw oscillations in a wind turbine.
159297	10-5-1983	Walter Grato Rossi, Plot 164, Montana, Pretoria, Transvaal Province, Republic of South Africa.	Wheel wrench support.
146196	18-1-1977	Werkzeugmaschinen, Oerlikon-Buehrle AG. Birchstrasse, 155, 8050, zurich, Switzerland.	Valve means associated with the tripple valve of a graduated release air brake, for controlling the pressure in a reservoir.
148086	16-3-1978	Youngflex S.A. 1, Rue Fries, 1701, Fribourg, Switzerland.	A cushion support structure for incorporaing in a seat.
148408	21-2-1978	Do.	Cushion support element.
160326	25-5-1984	Zaklady Azotowe Im 33-101, Tarnow, Poland.	Improvements in or relating to reactor for selective oxidation of organia compounds.

RENEWAL FEES PAID

150763	150796	151120	151278	151447	151453	151789
151901	151957	152349	152686	152697	152777	152884
153018	153955	154140	154205	154582	154840	155347
155363	155412	155607	155874	156138	156311	156439
156488	157356	157576	158267	158268	158377	158602
158729	158741	159000	159122	159231	159264	159484
159496	159632	159792	159793	159843	159878	159947
160158	161513	161969	162021	162122	162141	162384
162486	162513	162847	162866	163088	163512	163515
163591	163598	163736	163794	163884	164083	164339
164346	164425	164592	164669	164817	164853	165081
165205	165361	165365	165335	165563	165659	165824
166063	166468	166559	166840	167472	168204	168259
168274	168275	168442	168500	168543	168755	

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155793	155795	155797	155801	155802	155804	155809
155810	155812	155816	155819	155820	155821	155823
155824	155833	155834	155835	155836	155837	155838
155840	155844	155847	155848	155850	155852	155853
155854	155857	155859	155860	155862	155864	155865
155866	155868	155870	155873	155875	155881	155882
155884	155891	155895	155897	155899	155900	155909
155910	155912	155914	155915	155916	155918	155920
155921	155923	155925	155926	155928	155929	155934
155936	155937	155942	155945	155947	155948	155949
155952	155953	155955	155963	155964	155965	155967
155970	155974	155976	155979	155985	155989	155990
155996	155997	156000	156001	156003	156004	156006
156012	156014	156016	156020	156021	156024	156027
156028	156029	156034	156036	156037	156038	156039
156040	156041					

REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of the registration of the design included in the entry.

Class 1. No. 163554. Amaks Products, partnership firm of Bijwa House, 28, Park Road, Lucknow-226 001, U.P. "Halogen Light". August 27, 1991.

Class 1. No. 163609. India Tag Industries of 462, Dasgarha, Pusa, New Delhi-110 012, India, Indian proprietory firm. "Eyelet fixing machine". September 20, 1991.

Class 3. No. 163420. Crisana Synthetics Pvt. Ltd., Indian Company of Bharat Petroleum Installation, Wadi Bunder, Bombay-400 010, Maharashtra, India. "Container". July 19, 1991.

Class 3. No. 163430. Ranutrol Limited of F-85, Okhla Industrial Area, Phase-I, New Delhi-110 020, India. "Spout". July 19, 1991.

Class 3. No. 163561. Mipak Plastics Pvt. Ltd. of 16, Khetan Bhavan. 198J, Tata Road. Bombay-400020, Maharashtra, India. Indian Company. "Bottle". September 2, 1991.

Class 3. No. 163570. Brooke Bond India Ltd. of Brooke House. 9. Shakespeare Sarani. Calcutta-7000071, W.B., India. "Coffee Filter". September 4, 1991.

Class 3. No. 163614. The Proctor & Gamble Co., of One Procter & Gamble Plaza, Cincinnati, State of Ohio, U.S.A. "Dosing ball for release of liquid detergent in washing machine". September 23, 1991.

Class 3. Nos. 163629 to 163634. Ramchand Choithram Sons., Indian Partnership Firm of 10, New Cutlery Market, Opp. Jumma Masjid, Bombay-400 002 Maharashtra, India. "Hair Brush". October 1, 1991.

Class 3. No. 163723. Hindustan Lever Ltd. of 165/166, Backbay Reclamation, Maharashtra, Bombay-400 020, India. "Cap for a container". October 30, 1991.

Class 3. No. 163781. Chinar Trust of C-37-Connaught Place, New Delhi-110 001, India, Indian Trust. "Electric Rice Cooker". November 13, 1991.

Class 3. No. 163811. Eagle Flask Industries Ltd. of Eagle Estate, Talegaon-410 507, Dist. Pune, Maharashtra, India. "Flask". November 25, 1991.

Class 3. No. 163887. Indo Nissin Fods Ltd., Indian Company of 2A, Bharat Apartments, Race Course Road, Bangalore-560001, Karnataka, India. "Cup" December 4, 1991.

Class 13. No. 164067. Opera House Exports Pvt. Ltd., 119, Uday Park, New Delhi-110 049, India. "Textile Fabric". February 11, 1992.

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Nos. 158131, 158152 to 158154	Class 1.
Nos. 157755 to 157768, 158132 to 158134, 158135	Class 3.
Nos. 158136 and 158151	Class 4.

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Nos. 158131, 158151 to 158154	Class 1.
Nos. 158132 to 158134, 158135	Class 3.
Nos. 158136 and 158151	Class 4.

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